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## Table of Contents


PAGE

THE NEED AND OPPORTUNITIES FOR PREVENTION OF BLINDNESS AND FOR SIGHT CONSERVATION, Moacyr E. Alvaro, M.D., and Eleanor Brown Merrill ..... 91

"TIME MARCHES ON" IN SIGHT CONSERVATION, Ellice M. Alger, M.D. ..... 100

THE ATTITUDE OF THE SOCIAL SECURITY BOARD TOWARD PREVENTION OF BLINDNESS, Ruth O. Blakeslee ..... 107

THE PLACE OF MEDICAL SOCIAL WORK IN OPHTHALMOLOGICAL SERVICES, Edith M. Baker ..... 124

EDITORIAL:

Blindness from Glaucoma Can and Should Be Prevented, Park Lewis, M.D. ..... 132

THE FORUM:

Sun Glasses, Arno E. Town, M.D. ..... 135
Sight-Saving with the Chinese, Ann McHugh ..... 138
International Work, P. Bailliart, M.D. ..... 142

NEWS OF STATE ACTIVITIES ..... 144

NOTE AND COMMENT:

New Sound Slide Film Covers Prevention of Industrial Eye Accidents ..... 154
Large-Type Editions of the Scriptures ..... 154
Far-Reaching Ophthalmic Facilities in Leeds ..... 155
An Apostle of Neuro-Ophthalmology ..... 155
Report on India's Blind ..... 156
Glasses Can be Fascinating! ..... 157

PAGE

Two Wars Teach England Eye Casualty Procedure ..... 157
X-Ray vs. Ophthalmoscope in Eye Injuries ..... 158
M.I.T.'s Intensive Public Health Program ..... 159
One Hundred Thousand English Eyes ..... 159

CURRENT ARTICLES OF INTEREST ..... 161

BOOK REVIEWS, by Willis S. Knighton, M.D., and David Resnick ..... 165
Briefer Comment ..... 168

CURRENT PUBLICATIONS ON SIGHT CONSERVATION ..... 171

CONTRIBUTORS TO THIS ISSUE ..... 172

# The Need and Opportunities for Prevention of Blindness and for Sight Conservation*

Moacyr E. Alvaro, M.D., and Eleanor Brown Merrill

**COMMON problems of eye health link Brazil and the United States, and it is especially fortuitous to have a joint article by a representative of the national agency of each of these countries.**

## Prenatal and Hereditary Factors

The present century has taught us that the time to begin preventive work is long before the child is born. This is particularly true in the prevention of blindness. One of the major hazards to sight is syphilis, which may be transmitted from an infected mother to her unborn child. A blood test for every expectant mother, followed by the proper treatment when necessary, would save many children from impaired vision or blindness. In the United States, as of March, 1939, 26 states had passed laws requiring premarital health examinations to prevent the spread of syphilis, and four states required examination of expectant mothers to protect babies from this disease.

But not only syphilis is responsible for a comparatively large number of cases of blindness which may show sooner or later in life; there are some known hereditary diseases capable of destroying the sight and this fact should induce adequate legislation concerning the marriage of such people whose infirmities will probably be transmitted to their children.

Experiments have shown, too, that a diet rich in vitamin A, given to the expectant mother, is essential for the proper development of the visual apparatus.

* Read by Miss Sally Lucas Jean during the Good Will Cruise to Latin and South America, July 7–August 28, 1939, under the auspices of the World Federation of Education Associations, and published in excerpt form in the Section on Handicapped Children of the *Proceedings*.

Forceps extractions and other similar manoeuvers can easily traumatize the eye and impair one or several of its functions for life. Proper prenatal care will in many cases avoid the necessity for operative treatment.

### Ophthalmia Neonatorum

The decrease in blindness from ophthalmia neonatorum in the United States is too well known for more than brief mention. At the present time, 45 states and the District of Columbia require that a prophylactic be used in the eyes of babies at birth to prevent this disease. In the thirty-one years of the lay movement for prevention of blindness in the United States, an unceasing campaign of public education has succeeded in reducing blindness from babies' sore eyes from 28.2 per cent to approximately 7 per cent among new admissions to schools and classes for the blind.

In Brazil, although some propaganda had already been made for the compulsory use of Crédé's method, only comparatively recently, in 1935, was the first decree officially adopted in the state of São Paulo. Later, in close succession, several other states adopted similar legislation and now, out of 22 units (states and territories), 15 have already made the Crédé method compulsory. It is rather interesting to mention the fact that recently the National Society for the Prevention of Blindness sent out a map to the governments of the several states which had not, so far, adopted the Crédé method. In that map the several states where the Crédé method was compulsory were shown in white, while the others were shown in black. This seems to have worked out very well as a means of propaganda, for in a short time four other states reported having adopted the use of prophylactic drops at birth.

It is quite essential that the Crédé method should be enforced in the whole of Brazil, for statistics show that ophthalmia neonatorum is responsible for about 40 per cent of all cases of blindness in children.

### Infant and Preschool Life

Since sunlight, along with proper nutrition, determines the soundness and healthiness of the tissues of the infant's body, pediatricians regularly prescribe sun treatment for babies. Usually

they advise that sun baths be given before ten in the morning and after three in the afternoon, when the sun is not directly overhead and the eyes of the infant can be protected by pointing the feet away from the sun.

Adequate food, properly balanced and rich in vitamins, should be made available to every child; and the school teacher is in a privileged position to teach the child, or its parents, the proper way to eat, in the same way as she already teaches them elementary hygiene.

**Cross-Eyes, Squint, Strabismus.**—At birth the eyes of the baby work independently. When the eyes begin to follow movements, there is an effort to direct the gaze toward a moving object. This tendency is not evident much before the age of six weeks, but from that time on it should develop steadily. Normally, before the end of the first year of life, the habit of fixing the gaze of both eyes on the object of interest is well established. The power of blending or fusing images is developed in the visual centers of the brain and is necessary for the perception of depth in the single image. When no visual defects are present, the power of fusion proceeds normally throughout the earlier years of life, as does the co-ordination of muscles in walking and talking. Visual fusion should be well established at the age of six or seven years.

When a defect of vision is present, the development of fusion may be hampered and in time, usually before the age of four, one eye may turn in; when this tendency toward squint, or cross-eyes, is present, the importance of early correction is obvious. Decision as to method of treatment required for each case of squint can be determined only by a skilled ophthalmologist. The fact cannot be overstressed that the most satisfactory visual results are obtained when the child with cross-eyes—no matter how young—is placed under the care of an ophthalmologist as soon as the defect is discovered. Moreover, early care will do much to prevent the development of undesirable personality traits and unhealthy mental attitudes toward life so frequent in children with this condition who have been subjected to the jibes of playmates and the thoughtless remarks of adults.

**Eye Accidents in Childhood.**—The play material of children should be selected with a view toward the reduction of accident

hazards. Blocks with sharp corners, sharp-pointed knives, scissors, hooks, and sticks have no place in the play equipment of young children. Neither have fireworks nor toy pistols. Safety censorship over the play activities of the young child may be used not only to safeguard him from eye accidents, but also to guide him into the practice of safeguarding himself and others.

**Infections and Contagious Diseases in Childhood.**—The eyes of young children are much more susceptible to infection than are those of older children or adults. Hence it is important that any child with swollen, sticky, or inflamed eyelids, or with inflamed or running eyes, should be immediately separated from the other children and put under proper medical care. In children's diseases, such as measles, the doctor's instructions for eye care should be carefully followed.

**Behaviors.**—Sometimes, when children return to a group after a prolonged or serious illness, it may be apparent to the teacher that muscular energy is at a low ebb. Such children are usually protected from vigorous activities because of their evident lack of strength. It is well to remember that the eyes of the child are as much a part of the body as are the muscles of legs and arms. Like these large body muscles, the child's eyes, during convalescence, need protection from fatigue, and they should not be subjected to the strain of attempting to get clear images of nearby objects.

The alert teacher is in a strategic position to discover satisfactorily developing eye habits or to collect evidence which may indicate the need for examination by an eye physician. Through a simple vision test with the Symbol E chart, which any teacher may learn to use, she may gather further evidence of low vision in one eye, which in itself may be responsible for a tendency toward exclusive use of the other eye. She may also determine whether the child appears to have a limited range of vision. Moreover, from her experience with many children the teacher may observe the behavior of an individual child, and evaluate its significance in the light of what the rest of the children do. Reading difficulties which, according to statistics, occur in as many as 5,000,000 children in the United States alone, and where defective vision is almost always present to a smaller or larger extent, should enable the school teacher to spot the eye cases and have them duly examined by an

ophthalmic surgeon. It is essential, however, that the teacher of young children remember that, valuable as are her observations and the supporting evidence found in the results of a vision test, an examination by an ophthalmologist is the only real basis for judging the condition of the child's vision.

### School Life

If teachers are to know how to guard the eyesight of their pupils, they must understand certain fundamental principles. The process of seeing is threefold: eyes with which to see; light by which to see; and the brain to interpret the message carried by light to it through the eyes. Too long have teachers been concerned chiefly with but one phase of education—interpretation; they are often oblivious to the fact that the brain cannot interpret clearly a garbled message.

The child with defective or seriously impaired vision is at a distinct disadvantage. With early discovery and correction of the remediable visual defects, however, his mental growth and development proceed at a rate that is remarkable in the light of the previous handicap. When the defect is not corrected until the child has acquired some of the undesirable physical, emotional, and social habits that seem to follow under the circumstances, he is faced with the need of making up for lost time. He is forced to work under the handicap of both poor study habits and personality traits, which might have been prevented by early correction of the defect.

**Eye Examinations.**—The best eye health program provides each child with a thorough eye examination and continuous supervision of the eyes. When examination under ophthalmological supervision is not possible, the responsibility of the classroom teacher and school nurse increases for detecting and routing for correction children with visual defects. Alertness in recognizing symptoms suggesting eye disorders is a valuable supplement to the routine vision inspection given by the school nurse or teacher. Interpreting the ophthalmological findings to the parents, and helping the child adjust to his visual defect, are further responsibilities of the teacher. The professional preparation of every teacher should include supervised experience in simple routine vision testing, and understanding of the significance and limitations of the results of the test.

**Lighting.**—Conservation of vision involves not only concern with

eye conditions, but also the provision of correct lighting, natural and artificial—adequate illumination which is well diffused and distributed without glare—in schools, colleges, universities, and libraries, as well as in homes and places of employment; of hygienic seats and desks, since posture affects sight; and of books printed in clear type, with proper regard for paper, spacing, etc. If eyestrain is to be avoided, careful consideration must be given to the position of blackboards, which should never be placed between windows because of too sharp contrasts, nor where reflection will cause glare.

**Myopia.**—The etiology of myopia is still in the dark, but some essential facts are already known which enable certain measures to be taken to prevent this refractive defect from progressing, or at least to check its getting continually worse. Shortsighted children should be immediately given proper care, not only compelling them to use adequate glasses, but looking after their posture in class and avoiding all possible eyestrain. Shortsighted children, even when the degree of myopia does not justify sending them to special sight-saving classes, should be given special consideration by the teacher.

**Sight-Saving Classes.**—A small number of children—approximately one in 1,000 to one in 500 of the school population in the United States—will be found who, because of their serious eye difficulties, cannot advantageously carry on their work under the best conditions provided for the normally seeing, yet who have enough sight to use their eyes as the principal medium of educational approach to the brain. The best manner of meeting this problem seems to be the establishment of sight-saving classes in the regular school systems. In general, children whose vision ranges between 20/200 and 20/70 in the better eye, after correction, as well as children suffering from progressive eye difficulties, are candidates for sight-saving classes. So much has been written regarding the physical set-up of the special classroom for partially-seeing children, and of the educational material for their use, that it would be repetitious to mention them here.

The work of the sight-saving class is co-ordinated with that of the regular grade. That requiring close use of the eyes is done in the sight-saving class under the guidance of a teacher specially trained in this work; the amount of eye use permissible is prescribed

by an ophthalmologist. Oral work, rote singing, choral speaking, etc., may be taken in the regular grade. The philosophy underlying sight-saving class teaching is to train the visually-handicapped child to make a normal adjustment to his visual handicap so that he may play a useful rôle in the world's work.

### Trachoma

In countries where trachoma is prevalent, and especially in those where it is not complicated with ophthalmias which can rapidly destroy the eye if not properly treated—such as in most Latin American countries—the school teacher is a very important element in the general scheme of prophylaxis of this disease. School children should be systematically examined by an ophthalmologist equipped with a slit lamp, in order to find out all positive cases. These are then put under medical care, but the school teacher can easily co-operate in that treatment by actually putting the necessary drops into the children's eyes and, if adequately trained, can perform other treatments such as massaging, etc. The detection of trachoma in school children helps to find the familial focus; and the treatment of the child, the results of which are always exceedingly good, induces the rest of the family to think it worth while to seek treatment. In the several countries where this method has been adopted, i. e., the Argentine, Tunisia, etc., results of this prophylaxis system are excellent; in the Argentine province of Santiago del Estero over 30,000 people were duly treated during the past 10 years, and this treatment was responsible for a reduction by half of the percentage of trachoma in school children. The financial aspect of this method is worth considering, too, for the total expense entailed by the treatment of the 30,000 patients only came to about $10,000 a year.

### Study Facilities for College Students

By the time children have reached high school they should be prepared to assume, under guidance, some of the responsibility for their own eye health, and by college age the student should know just what the status of this vision is and how he may safeguard it. Otherwise, the heavy eye load during the early years of college life may result in strain and fatigue.

While light is by no means a substitute for ophthalmic care, its proper use is of major importance, as poor illumination may be a handicap even to the student with normal, healthy eyes. The student living in a college dormitory particularly should know what constitutes good illumination, since in this environment a large part of the responsibility for the discriminating selection and use of light rests upon the student himself. Even in colleges in which the administration provides good rooms and adequate lighting facilities, the arrangement of lamp and desk is left to the individual student.

That college students, even those in institutions preparing teachers, are not thoroughly grounded in the principles of eye hygiene would appear evident from surveys conducted several years ago in various sections of the United States. Responses to a test on the eye health problems of school children revealed that the senior students had limited information on this subject. Visits to a large number of institutions disclosed that conditions under which students worked, especially the study facilities, and the practices of the student health service in vision appraisal and supervision, were far from adequate. Further study of the situation made evident the need for an eye health program in institutions preparing teachers, so that graduates would be equipped with the necessary information and skills to meet their responsibilities for the eye health of children.

Efforts to develop such a program have since been undertaken with representatives of these institutions, of the official organization of medical directors of student health service in colleges, and of the three national ophthalmological associations in the United States. This joint action is concerned not only with the adequate preparation of prospective teachers, but also in extending knowledge of sight conservation and the prevention of blindness among teachers in service. When its objectives are accomplished, all teachers, from those in the nursery schools to those in colleges and universities, should be fully prepared to play their important rôle in saving sight.

### Eyes in Adult Life

Habits of eye health acquired during childhood cling to the adult. Having been taught to safeguard his eyes while at play, at

sports, and in the school workshop or chemical laboratory, such a person will later appreciate the necessity for wearing goggles and other protective eye devices in occupations hazardous to sight, and for professional first aid when even a minor eye injury occurs. He will understand the importance of good lighting both at home and at work, and the desirability of wearing glasses when prescribed by an ophthalmologist. Even though he may never have needed glasses before, he will realize that some time in his forties the normal loss of accommodation will make it necessary for him to use them for close work. He will know that as mid-life approaches, periodic eye examinations are increasingly important, since glaucoma, cataract, and other diseases may attack the aging eye, and early discovery and treatment are imperative if sight is to be saved.

# "Time Marches On" in Sight Conservation*

Ellice M. Alger, M.D.

"THE passage of time has abolished many of the once common causes of blindness," says the author, "but new dangers demand study."

IT IS human nature to take good health for granted until something goes obviously wrong. We are astonished when we become sick or are rejected for life insurance. Often we find we have some condition that ought to have been discovered long ago, or which might have been prevented entirely.

There is no state that seems more dreary or hopeless to us than being blind, but none of us expects to be blind. Nevertheless there are many more people than we suspect who are blind. There are thousands of others all about us who, unwittingly, are on their way. There are countless more who are neither blind nor likely to be blind, but who are missing much of life's joy or going through life on one cylinder because their eyes need the same sort of check-up they give their car or their watch or their teeth. The tragedy of it is that many of these troubles might have been prevented altogether. Others could have been arrested before they really got under way.

## Beginnings of Medicine

From the most ancient times there have been physicians who devoted themselves to the care of the sick. They were keen observers who knew a lot about symptoms and results but almost nothing about disease itself. They lived—and often died—among their patients, while as a class they tried to live up to that oldest

* Address, under title "Let There Be Sight—The Prevention of Blindness," broadcast over Station WABC on October 18, 1939, under the auspices of the Medical Information Bureau of the New York Academy of Medicine.

and noblest of professional pledges, the oath of Hippocrates, which every medical neophyte takes to this day. Modern medicine really goes back little more than a hundred years. Before that time the physician made his living from attending childbirth and broken bones and typhoid and epidemic diseases rarely seen today. His diagnostic instruments were the stethoscope he carried in his silk hat and the thermometer in his vest pocket.

The surgeon was a "keen cutter," operating only because his patients could not stand the pain or because so many of them died. At his best the physician could only echo the phrase of the immortal Paré to his grateful patient, "I tended; God cured." Medicine was a noble art but not yet a science.

The eye physician was practically limited to diseases of the lids and external eye. He could see "pink eye," trachoma, ulcers and mature cataract readily enough, but as yet no one had ever looked at the inside of the living eye where its really important structures are. The textbooks spoke learnedly about amblyopia and amaurosis, which meant "poor sight" without any obvious cause. The specialists were almost all general surgeons who had the light hands and the delicate touch that made eye surgery possible. They knew as little about the eye as their colleagues did about the other organs of the body.

The modern mind is not any better than the ancient. Socrates and Aristotle and the old Greek philosophers still hold their ancient prestige, as do Alexander and Caesar and Napoleon and Shakespeare and Milton. But when Bacon and Descartes pointed the way to the "experimental method" the new era of science began. On it is based our entire modern civilization, though its cumulative growth sometimes threatens to outstrip our social control and destroy the very civilization it has created.

Under it medicine gradually became a real science and its practice a great art. About the middle of the last century its progress became notable and its frontiers were pushed forward further in 25 years than in all previously recorded time. The pace seems to be getting faster and faster. Every nation, every race, every religion was represented in this brotherhood of science, composed of men who seemed for a time at least to speak a common language and share a common humanity.

**Medical Heroes**

The young Frenchman, Pasteur, who was not a physician but a chemist, sought to answer some of the problems of his own people: why milk soured and wine spoiled; why cattle and sheep perished on a wholesale basis; why the bite of a mad dog was invariably fatal. He proved in the face of bitter opposition that there was no such thing as spontaneous generation; that there was a new order of microscopic life which accounted for many diseases. He showed how these germs could be segregated and grown like plants in a garden, and by judicious weakening used to prevent or cure the very diseases they caused. All we know of antisepsis, asepsis, immunity, toxins, antitoxins and vaccines, which are the foundation of modern medicine and surgery, stem back to him and his disciples. He was one of the great men of all time and one of the noblest.

The German, Koch, following the same trail, discovered the bacillus of tuberculosis and made the first crude tuberculin which he vainly hoped would cure it.

The Scotchman, Lister, applied the germ theory to surgery and showed the way to the antisepsis and asepsis which have transformed the hospital from a shambles into a haven of hope.

Neisser discovered the gonococcus, and Credé found that by putting a few drops of silver solution into the eyes of the newborn babe he could abolish a disease which caused some 20 per cent of all blindness.

Schaudinn discovered in the blood the corkscrew germ of syphilis, "the great pox," as it was called, a much greater plague than the smallpox ever was. Wassermann devised a reliable method of testing the blood and Ehrlich, after 606 experiments, hit on the salvarsan which destroyed the germ without killing the patient.

We now have at least the tools for abolishing a disease which has countless victims in every community, which may blind the innocent and the guilty alike, from the infant in his cradle to the paretic in his asylum.

Another German, Virchow, taught us to stain and examine very thin sections of tissue with the microscope and see how they looked in health and disease, which has revolutionized our knowledge of both physiology and pathology; and a Swede, Gullstrand, devised a method by which microscopy could be applied to the living eye.

Morton, in America, and Simpson, in Scotland, gave us ether and chloroform which abolished the agonies of surgery and obstetrics. Carl Koller, an Austrian born, who has practiced all his life in New York, discovered cocaine, which, with its substitutes, produces the "local anesthesia" under which we can operate without hurry and without pain. It has enormously increased the possibilities of eye surgery.

Billings, in Chicago, showed that unsuspected infections of our teeth and tonsils were common causes of troubles elsewhere: the eye, the heart, the brain.

### Progress and New Problems

We have developed the theory of allergy, which in practice means that one man's meat may be another man's poison. It accounts for such varied symptoms as hives, hay fever and asthma, and includes a good many eye conditions as well.

The discovery of vitamins now explains the age-old reputation of cod liver oil. New vitamins appear almost faster than we can keep track of them and they are used as selling inducements for everything from chewing gum to skim milk. Nevertheless they open a vast field for exploration. We know they play a part in night blindness and suspect they may be factors in many nutritive conditions that we have hitherto called "senile."

We are now investigating an entirely new field, that of the viruses. They certainly exist, though they are way beyond the reach of our microscope. Apparently they are the solution of our age-old eye problem of trachoma, which becomes epidemic in the filth and malnutrition of every war-torn age. Fortunately modern chemistry, among its numberless contributions to medicine, has just given us sulfanilamide, which promises as much for trachoma as it does for pneumonia and the other acute infections.

### Milestones in Sight Conservation

The German, Helmholtz, invented the first crude ophthalmoscope and so made it possible to see the inside of the living eye, which no man had ever seen before. It is now possible to study the beginning and progress of high blood pressure, cataract, glaucoma, optic atrophy and a host of other anomalies. We can even tell

much about the condition of the brain itself, for the retina is but an expanded portion of that brain. It was the greatest forward step ever made in ophthalmology for it made possible diagnosis, which is the foundation of all intelligent prevention and treatment. Every physician is taught to use it but proficiency comes only with long practice, while vast experience and judgment are needed to interpret its findings.

Donders, a Dutchman, systematized the refraction of the eye and made it possible for the patient to have his glasses fitted intelligently. Later on it was discovered that glasses not only could improve vision but relieve strain and so abolish the pain and nervous symptoms of thousands who thought there was nothing the matter with their eyes because their vision was so keen.

The New Yorker, Stevens, investigated anew the action of the muscles which enable us to use our eyes together. He laid the foundation for the elimination of one of the great causes of eyestrain which is popularly known as "muscle trouble." It marked the beginning of a new era in the study and treatment of cross-eyes.

When Edison first invented the crude incandescent bulb, he made it possible to measure, direct and control the light under which we often spend half our waking hours. The modern illuminating engineer is no mere merchant of light but a scientist who is making a vast contribution to ocular health and efficiency.

Neither must we forget what we owe to the makers of glass and the grinders of lenses. The telescope has made us masters of the infinitely far and the microscope of the infinitely small. They have made it possible for most of us to function in our modern industrial civilization for an extra quarter of a century; to see well and to see easily. Glasses are perfectly susceptible of mass production, and aside from the over-emphasis on frames and fashion would be within reach of the poorest. The science of medicine is today being developed in the modern research laboratory, often by men who are not physicians. Sometimes they have no idea that their discoveries, like radium or the *x*-ray, have any relation to medicine.

### Modern Medical Practice

Each forward step in medical science has led and will lead to countless others, and we are long past the time when any one mind

can master it all. The eye physician specializes in a comparatively small field but his fundamental training is identical with that of other physicians. He can adapt much of their work to his own field and he has much to contribute to the common fund of knowledge.

The art of medicine is learned in the hospital and the clinic. Here the physician puts into practice what he has learned in the school and the laboratory under the guidance of his elders. Here he sees a mass of material, the rare cases, the difficult operations. Here he acquires diagnostic ability and operative skill and finally the good judgment which alone makes them safe. Here he sees and serves, in his lifetime, countless thousands of the poor and the unfortunate, without money and without price. He is infinitely better trained and more competent than his elders were at his age. He has a mass of diagnostic instruments and laboratory aids of which they never dreamed.

The passage of time has abolished many of the once common causes of blindness. Smallpox is seldom seen. Babies' sore eyes, which once filled our asylums for the blind, is becoming a rarity. The industrial accidents and poisonings which were once so common are becoming rare, but new dangers demand study. Trachoma has been practically eliminated except in certain backward sections of the west and south and among our Indian wards. We can see the end of syphilis, the great imitator and the great destroyer. Today people live twice as long as they did a hundred years ago, and middle life and old age bring new problems: cataract, glaucoma, hardening of the arteries, retinal diseases.

### The Need for Public Education on Eye Care

So far the general public has not gotten anything like the benefit it should from our increase in medical knowledge. It still believes, as it did a hundred years ago, that any good druggist must be a fair doctor, and that anyone who sells glasses can examine the eyes. It never can keep clear in its own mind the difference between optician and optometrist and oculist (as it still calls the eye physician). It still believes that sharp eyes mean good eyes, and its first instinct when its eyes go wrong is to try somebody's eyeglasses or magic eye drops.

It is just as important to have an occasional competent exami-

nation of the eyes as of the heart or lungs or kidneys. It should at least be done on first going to school, before choosing a business or profession, in middle life and again as we grow older. There are not enough eye physicians in the world to do a fraction of this work.

In our large cities, crowded with hospitals and clinics and doctors, it is possible to secure adequate diagnosis and treatment for rich and poor alike. But in the small towns and the country half our people live in a fool's paradise. In some communities there is no one who can tell them certainly whether their eyes are well or diseased. There is no one who can prescribe intelligently for them and there is no place where they can secure even emergency treatment for ocular illness or accident. We need more physicians. We need more hospitals, but they will come only when our public really feels this need.

# The Attitude of the Social Security Board Toward Prevention of Blindness*

Ruth O. Blakeslee

DISCUSSES the Social Security Board's part in prevention of blindness, and presents the recommendations made to state agencies administering aid to the blind.

THE subject assigned for this paper is one which presents broad and manifold ramifications, for the Social Security Board has approached the problem not only as an administrative body with specific responsibilities, but also as a citizen group with a general responsibility toward the problem as a whole. As an administrative body the Board must operate within the limits of the authorities with which it is vested, and of the funds at its disposal.

## Administrative and Co-operative Services

The provisions of the Federal Social Security Act limit the use of federal funds for medical care to: first, administrative services, such as the examination of applicants for aid to the blind; the review and supervision of the examination process, and such research as may be done; and, second, to such payment for medical services as the recipient of aid to the blind may choose to make from his unconditional assistance payment. The amount of federal matching with respect to an assistance payment is limited to *$40*. The recipient may not be *required* to use his assistance payment for any particular purpose and federal funds under title X may not be used by the agency to pay for medical, surgical, or hospital care.

As a citizen group, however, the Board recognized that by relating efforts within a limited area to active forces dealing with the

* Presented at the National Conference of Social Work, Grand Rapids, Michigan, May 28, 1940.

same problem, accomplishment might be possible beyond that to be achieved by individual effort. The Board has sought, therefore, to contribute to the general development of a vital and growing movement that had been carried on for many years by organizations such as that sponsoring this program, as well as to exercise leadership in the more limited possibilities under title X of the Social Security Act.

One of the first steps taken by the Board was to arrange for the assistance of Miss Audrey Hayden in planning the Aid to the Blind program. During her period of service with the Board, Miss Hayden prepared a monograph on "Outline of Program on Prevention of Blindness," the opening sentence of which may give some indication of the scope of the interest of the Social Security Board in the problem of blindness.

> "This skeleton of a program for prevention of blindness is presented to the workers of the Social Security Board in order that they may become aware of the fact that the problem of the blind in the United States cannot be solved merely from the isolated standpoint of Public Assistance. The prevention of the condition which necessitates Public Assistance is the proper scientific approach to the situation."[1]

### Prevention of Blindness Aims

This is more than an idle statement of philosophy; it is a statement of active interest in a total problem that transcends the immediate responsibility for an assigned task. This interest has found expression in publications and recommendations transmitted through the field staff to the states concerning activities not always seen as relating directly to the prevention of blindness, and in the day-to-day contacts of official and unofficial nature. Some of these suggestions are as follows:

Verification of age as a condition of eligibility for Aid to Dependent Children or Old-Age Assistance brings the welfare agency into contact with the Bureau of Vital Statistics and affords an opportunity to review with appropriate state authorities the system for reporting and checking on the use of prophylaxis in the eyes of newborn babies. The determination of mental or physical in-

[1] Hayden, Audrey, "Outline of a Program on Prevention of Blindness." Bureau of Public Assistance Circular No. 2.

capacity of parents eligible to receive Aid to Dependent Children, as well as health care for recipients of public assistance, includes: prenatal and postnatal care, immunization of the growing child against communicable disease, periodic health examination, including eye examination for adults and children, with adequate provision of treatment. Adequate housing standards provide protected and supervised play places where children may be protected from eye and other injury. Surveys to locate blind persons without regard to their eligibility for public assistance, and of treatment facilities within a state or community, have been planned. In several instances co-operation of other federal and voluntary agencies has been enlisted to undertake studies or to make funds or personnel available to enterprises in which the Board could not participate financially. Information has been passed on to other governmental or voluntary agencies where it might contribute to the development of active interest in the field of prevention of blindness as a whole.

Time has been taken to discuss these activities because of the importance of recalling that practically every social service has direct or indirect relation to the prevention of blindness. Many opportunities are offered to the person engaged in the social services to contribute to the materialization of a better and broader program for prevention of blindness, and none of these opportunities, however small, can we afford to lose. The accomplishment of a single act may seem insignificant but that act may add to the gathering interest in the problem, and the alignment with a scattered or discouraged support may well outweigh its practical results.

### Practical Steps in Blindness Prevention

Co-operation is a word I hesitate to use because it has become something of a shibboleth. We talk of "integration," "co-ordination," and "co-operation," and just last week I was told that these three words were obsolete and the present term is "unification." Too often one finds that a definition of co-operation once given as "co-operation is a situation in which one agency coos and the other operates" is all too true. Prevention of blindness is not the problem of any one agency, however; rather it is the responsibility of every

citizen, every organization, every professional person, and can be promoted only by continuous teamwork.

The Social Security Board has attempted to take some practical steps toward providing an adequate framework within which to study and deal intelligently with this problem of blindness. In the early days of administration of Public Assistance, the Board asked the office of the Surgeon General to detail to the Bureau of Public Assistance the services of a competent ophthalmologist to give direction to the medical aspects of the assistance program. For four years Dr. C. E. Rice has been working with the Board and, by arrangement of the field representatives of the Bureau of Public Assistance, consulting with the states on their problems and their methods of work. In addition, he has maintained contacts with the U. S. Public Health Service, the medical staff of the Children's Bureau, and Farm Security Administration, and with members of the medical profession, bringing to the Bureau of Public Assistance the benefits of advice and experience far beyond that which would be possible without professional service in this area. The use of a medical officer to direct the medical aspects of the program and the joint use of the same service in a contiguous field may commend itself to state or local agencies concerned with similar responsibilities. The statement of "Principles of Organization and Administration,"[1] of medical care approved by the Board of Directors of the American Public Welfare Association in December, 1939, may give further guidance to a state considering a similar project.

A third significant step was taken by the Social Security Board in November, 1936, when the requirement was made that the states adopt a definition of blindness in terms of ophthalmic measurement, provide as a part of administrative cost for an examination by an ophthalmologist or physician skilled in diseases of the eye, prescribe forms for reporting on eye examination to contain certain minimum information, and to assure a review and approval of report forms by a supervising ophthalmologist.[2]

This definition and report form were drafted after extensive consultation with federal and voluntary agencies and members of the medical profession:

[1] "Medical Care—and How." *Survey Midmonthly*, January, 1940.
[2] P.A. 701 and 701A.

"In general, central visual acuity of 20/200 or less in the better eye with correcting glasses is considered as economic blindness. An individual with a central visual acuity of 20/200 can identify a standard object (the Snellen test character) at a distance of 20 feet, while an individual with normal vision can identify the same object at a distance of 200 feet.

"An individual with central visual acuity of more than 20/200 in the better eye with proper correction is usually not considered blind unless there is a field defect in which the peripheral field has contracted to such an extent that the widest diameter of visual field subtends an angular distance no greater than 20 degrees."

The examination procedure was required for immediate purposes only on persons whose applications were accepted after December 1, 1936, or refused after that date on medical grounds. Adequate time was allowed to arrange and pay for examinations on persons whose applications had been accepted before that time.

This step is familiar to you all, but it marks an important development in treatment and prevention of blindness because it resulted not only in a basis for competent medical guidance in a medical plan, possible benefits to individual blind or near-blind persons, support by the medical profession, and protection to the taxpayer, but provided for the first time accurate, objective, and comparable data on the conditions and causes of blindness for a substantial proportion of the blind in the United States. Not all of the states adopted the definition of blindness recommended by the Social Security Board. Of the 43 jurisdictions that have administered plans for aid to the blind approved by the Social Security Board, 16 have adopted the definition as suggested, 5 have omitted visual field defect, 19 have provided 20/200 visual acuity and adopted a general statement on visual field defect, 2 have accepted 10/200 visual acuity, and one has adopted a percentage reduction in normal vision. These variations do not detract substantially from the value of the data recorded on examination reports, and do, we believe, reflect a wholesome amount of determinism exercised by the states under competent medical advice.

### The State Supervising Ophthalmologist

The services of supervising ophthalmologists have been obtained by the states in a variety of ways—by employment of full or part-

time paid medical officers, by borrowing from another public department, by volunteer services, or by use of an advisory committee directing the work of an agency staff member. The services of supervising ophthalmologists in the states have resulted in marked improvement in the recording of medical findings by local ophthalmologists. Particularly where the supervising ophthalmologist worked with a medical advisory committee has there been a great stimulus to interest in restoration of sight and study and treatment of causes of blindness.

The task of relating the work of a supervising ophthalmologist to the general work of an agency whose primary function is not that of medical care, and to the individual representatives of the medical profession who participate in the program, is not an easy one. Many of the ophthalmologists have found it difficult to return examination records to examining physicians for further information, to establish adequate fee schedules, to authorize re-examination by a more competent examiner, to take sufficient time to interpret to a new examining physician his contribution in the medical determination of blindness, or to accept the continued frustration of lack of funds to provide remedial treatment. But these problems are declining in proportion through the experience of working together with the assistance agency and associated groups. It is hoped that the work of the supervising ophthalmologist will be greatly facilitated with the establishing of adequate classification plans under the merit systems in state agencies, and with the 50 per cent federal matching of administrative costs under the 1939 amendment to the Social Security Act. Even more important perhaps to the clarification of the functions of the supervising ophthalmologist in the assistance agency is the experience of three years of working together of the agency staff and the profound interest and respect for the contribution of each that has developed between physician and social worker in most states.

### Operations of Advisory Committees

The work of the supervising ophthalmologist has generally been found to be more effective where he has worked in conjunction with a carefully selected advisory committee. In general, these committees operate to:

1. Review and approve medical aspects of policies and procedures before adoption by the agency.
2. Study the qualifications of physicians engaged in treatment of diseases of the eye throughout the state, and recommend objective standards to be used in admitting physicians to participate in the program.
3. Review the applications of physicians desiring to participate in the program and recommend acceptance or rejection of applications, and to decide which of the participating physicians may do surgery.
4. Recommend for adoption by the agency fee schedules for payment for services, both professional and hospital.
5. Advise on difficult decisions where the agency or the applicant is reluctant to accept the diagnosis or report on examination.
6. Contribute to the knowledge and understanding of supervisory and investigating staff of the agency with respect to medical aspects of blindness.
7. Advise on studies or research projects.
8. Evaluate experimental projects in the field of health care.
9. Further co-ordination of health and welfare activities in the community.
10. Interpret the health aspects of the medical program to the medical profession and to the community at large.

It is interesting to note the progress that has been made in sight restoration and prevention of blindness in states where there has been good medical direction. It is understandable that since the people who come to the attention of the Public Assistance agency are, or believe themselves to be, blind, the first excursions into the field of medical care in the administration of public assistance are directed toward the restoration of sight. Recommendations of local examiners indicate that approximately 15 per cent of the persons found eligible for aid to the blind might have vision restored.[1] In 20 states without federal funds other than those used for payment for examinations or assistance grants, sight restoration programs are progressing. The transition between active interest in remedial treatment and preventive work is easily made, however, and once a state begins to do something about restoring sight, the interest in preventive work follows naturally and inevitably. The

[1] Field reports of Dr. C. E. Rice, Consultant to the Social Security Board.

following developments are illustrative of those going on throughout the country:

In one state the examination of persons discharged from the school for the blind, who applied for aid to the blind, led to the extension of the examination service to applicants for admission to the school and, ultimately, to a more adequate eye examination for pupils in the public schools and the establishment of sight-saving classes.

In another state it was necessary to transport an ophthalmologist to a remote section of the state to make eye exminations of applicants for aid to the blind. On a return visit sufficient community interest had been aroused to arrange, under sponsorship of a service club, to open the examination service to others than applicants for aid to the blind and to bring in patients to the examining center.

In still another state the committee in co-operation with the departments of health and education and the medical society introduced a plan for demonstrating the need and practicability of general eye clinics in rural areas which were later carried on and financed by the state health department.

In another, a well-advertised community clinic was held in which a substantial amount of trachoma was found. A co-operative project for the treatment of trachoma was set up with the state health department which, after an experimental period, will probably be taken over and extended by the health department.

In several states the supervising ophthalmologist is now serving as consultant in the health department on some phase of preventive work or in general eye clinics in remote areas.

### States' Initiative in Co-operation

In the states that know their problem and have conviction that something must be done about it, resourcefulness and determination are providing a beginning of constructive effort, as one state monthly magazine says:

> ". . . Sufficient funds and facilities are probably available at present to provide eye treatment for all persons who are unable to secure them with their own resources and who offer reasonable hope of profiting by treatment. This service is available, not only to those who are already blind, but also

> to those who are in danger of becoming blind without treatment. . . . The Welfare Act limits the eye treatment program to adults so that in the case of children with visual defects other resources must be found . . . . If the child is a recipient of aid to dependent children and is not receiving the maximum award under the law, it is sometimes possible for the county welfare department to increase the grant to take care of medical expenses for eye treatment. If the county department is already giving the maximum award, the child must look to some other source for eye treatment . . . . Each county welfare department also has a 'sick child' fund which can be used by court action to finance the hospitalization of any needy child requiring eye treatment."[1]

The interest, the intent, and the initiative shown by the state in making the most of the facilities at its disposal are challenging indeed.

One state administrator said to me:

> "Nothing that has happened in my eight years of administration of this agency has served to win public sympathy and change the temper of a hostile legislature as did the information that five persons who had formerly been blind were walking down the streets of the state capital with their sight restored."

### Understanding of Causes of Blindness

Knowledge about the blind seems in truth to be a spur to purposeful and constructive action. Therefore, the next step logically seems to be an attempt to make available to the states and to federal agencies more knowledge about the causes of blindness.

Immediately following the preparation of the standard definition and the form for reporting on eye examination, the Board asked the Committee on Statistics of the Blind to work co-operatively on a classification of causes of blindness. The need for such a classification to supplement the original report on eye examination of the Committee on Statistics of the Blind, on which the Social Security Board form was based, had long been recognized. Experimental work was begun in this area by the Committee on Statistics of the Blind six years ago. The task of developing such a classification, however, was an arduous one and involved an amount

[1] *Public Welfare in Indiana.* Vol. 1, No. 3. Series 265. March, 1940.

of detail work difficult to achieve through a voluntary committee. The Committee on Statistics of the Blind, in co-operation with voluntary and public agencies and members of the medical profession, has made use of the knowledge and skills of physicians and social research personnel; and prepared a preliminary classification which was published in *The Outlook for the Blind*, April, 1933.[1] This classification has since been revised on the basis of experimental use. The same agencies have been working co-operatively on a manual of instructions to implement its use.

It is hoped that some study of the causes of blindness may be undertaken in the near future in states where a substantial proportion of the examination records are adequate and complete. Approximately twenty-five states have already indicated interest in analyzing their records according to the classification. Research of this nature should serve to improve the quality of examinations and the adequacy of reports; to produce significant information as to the causes of blindness in general, and the special problems in particular communities; and to provide impetus to the use of existing resources or development of new facilities for remedial and preventive work. The 1939 amendment to the Social Security Act which requires that after July 1, 1941, each state shall establish adequate safeguards to protect the privileged and confidential nature of public assistance records, should also serve to improve the quality of medical reports—particularly where the cause of blindness is a venereal disease. It is hoped, of course, that additional funds may be made available for remedial treatment and preventive work, because of the manifold evidence that where interest has been aroused and adequate and accurate information is available, the interests of the blind or near-blind will be served by the provision of better tools with which to work.

I do not want to give the impression that the Social Security Board seeks or deserves any special credit for the development of the classification of causes of blindness, or the planning for its use. The work was begun before the Board came into existence. Much of the detail has been carried on by voluntary agencies who first conceived the plan. Mr. Ralph G. Hurlin and Miss C. Edith Kerby of the Committee on Statistics of the Blind, particularly

[1] "Classification of Causes of Blindness." *The Outlook for the Blind*, April, 1933.

have given unstintingly of their time and energy in the development of the classification and the testing of its practicability. Had it been necessary or desirable to undertake independent responsibility for the development of adequate tools for dealing with the problem, I believe that the interest of the Social Security Board would have been sufficient to finance and carry out the necessary steps. It is far more important, however, that there has been recognition of the fact that the cumulative results of co-operative efforts have been more than the sum of accomplishment of individual agencies. The results have been more far-reaching, and the prospects for future achievement more promising, than if any of the public or voluntary agencies had been dominated by vested interest or concerned with credit for whatever success the future may hold.

### Significance of Co-ordinated Efforts

This accord in defining objectives of the program and acting to achieve them has special significance to an agency dealing with a problem of so many facets. Everything that each of us can do is important to the prevention of blindness. Because of the immediate contact of the public assistance agency with blind persons, and of the deep-seated interest in prevention of the tragedy of blindness, occasionally there is failure by such agencies to recognize the contribution from schools, physicians, health departments, public or voluntary agencies, to alleviation of the same problem, and to include them in the plans and procedures of the agency. No incidence of interest in the prevention of blindness can be allowed to die or dry up! The efforts of every interested individual and agency are needed to promote a program! In many areas, health and educational agencies are reluctant for various reasons to undertake responsibilities that will contribute to the prevention of blindness. In such instances the public assistance agency may need to undertake demonstration work to show what can be done. After the initial period, latent interest of departments or agencies whose functions and facilities are more adequately suited to the continuance of the preventive work may be aroused, and it may be important at that point to turn over to the appropriate agency a

service or function that has been initiated by a public assistance department.

Vested interest, pride of accomplishment, ambition for the future, may make this difficult but it can and should be done. For example, one state of which I know discovered through its examination records of applicants for Aid to the Blind the existence of a startling amount of trachoma. A co-operative project with the health department was initiated for the treatment of trachoma with sulfanilamide and its derivatives by a traveling clinic financed by the public welfare department with the assistance of local health personnel. The examination and prescribing of treatment proceeded according to plans but, for lack of funds, close supervision of treatment was impossible. After the next meeting of the legislature the health department was provided with adequate funds to carry out examination and diagnostic services, and to provide the necessary supervision to individual patients under treatment. The welfare department had not only become intensely interested in the program, but had received considerable acclaim from the community for its efforts. Be it said to the everlasting credit of both health and welfare departments, however, the total program was turned over to the health department and the services extended to persons who were not yet blind or not in need of public assistance.

Conservation in many areas means avoidance of waste. To the worker with the visually handicapped, however, it means not only the protection of remaining vision of a handicapped person, but active service to increase the amount and make constructive use of what vision remains. Conservation of interest and energy present a challenge for the use of the same dynamic interpretation of the word conservation. It is hoped, therefore, that state agencies working with the blind will make active use of existing facilities within the state, will carry on experimental and demonstration projects under proper direction where appropriate facilities do not exist or cannot be immediately developed in health agencies, and will transfer successful projects to agencies where they can be extended in coverage or improved in quality as soon as it can be determined that such transfer would be advantageous to the interest of blind persons or of those threatened with blindness. This is teamwork of the highest order.

### Approaching the Problem of the Blind

The Social Security Board is actively concerned with the problems of individual blind or near-blind persons as well as with the broader aspects of community action. Mary Dranga Campbell, in an appreciation of Mervyn Sinclair of the Pennsylvania State Council for the Blind, published after his death, has quoted his reply to the question: "Upon what does successful work with the blind depend?" Mr. Sinclair, who had himself become blind through accident in middle life, said:

> "First, upon an organization—experienced, vigilant, competently staffed. Second, upon individuals who support such organizations for the good of the community, and out of simple regard for others. Third, upon an informed public opinion which knows that the blind man is not an object of pity, but a human being—to be loved, trained to be self-supporting, educated, given medical treatment, and taught to live with himself and others cheerfully, intelligently, and courageously!"[1]

In medieval days the blind man was "considered a holy man and allowed to beg." Contemporary treatment of the blind must be characterized by no such mingling of awe and pity, but must be based on understanding of the particular problems of the blind person that arise from both his physical limitations and his life experiences. This understanding must serve to develop the agency procedures; to adapt the skills of social case work used in dealing with the individual; and to permeate the entire community with a constructive and responsible attitude toward the blind individual.[2] Aggressive support of a program for sight restoration and prevention of blindness is highly commendable. But an over-zealous attack on the community problem that applies punitive or restrictive measures to dealing with blind individuals and attempts to force acceptance of remedial treatment by refusing to give assistance to persons who do not avail themselves of opportunities for medical care, is both shortsighted and ineffectual. This is not maudlin sympathy. The writings of Meyer and White have expounded fully

[1] *Outlook for the Blind.* February, 1940.

[2] In seven states the public assistance agency is prohibited from giving assistance to an individual who refuses medical care, in five states the denial of assistance under such conditions is optional, and in seven states an individual who is in need of continuing hospital care is precluded from receiving assistance.

on the relation of sensory integration to the ability of the individual to face realistically and deal effectively with his own problems. One authority has recently written:

> "As long as mental health is confused with purely mental functioning, the problem of education will remain unsolved. The wholesome personality as an expression of the total organism involves integration of physical and mental processes. Education that places an increasingly greater emphasis upon sensory levels—that aims at behavior as well as mentation, conduct as well as introspection, and doing as well as feeling—is achieving most practical and satisfactory results in method and outcome." [1]

The blind person lives in a realm in which his sensory experiences are limited. His adjustment may be to withdraw, to seek through fantasy or imagination the outlets he cannot achieve through visual experience, or he may be taught and helped to compensate in more productive ways for the limitations imposed by his handicap. We, all of us, have some dread of surgical or drastic medical treatment. Sir James MacKenzie is reputed to have said: "I recognize that practically every patient who consulted me wanted to know, not what ailed him, but what was to be the outcome of his complaint." The peculiar susceptibilities of the blind person to anxieties may be increased when he is faced with the problem of accepting surgical care. He runs not only the ordinary risk in undergoing operative treatment, he takes a risk of losing what vision he may have retained. Where such drastic medical treatment is not indicated he may be bogged down in the inertia of despair and detachment that have grown out of his particular adjustment to a difficult life experience. His problem is very real. Force or punishment will not alleviate that problem. Methods that are or seem to him to be harsh or unjust may offset the benefits of medical treatment and create new personal problems in an already complex situation. The approach to helping the blind individual to avail himself or opportunities for medical care is through the use of the most skillful case work service over a period of time—time in which to become accustomed to the idea of risking change, for any alteration in familiar surroundings or customary activities is a greater adventure to the

[1] Davis, John Eisele. "The Sensory Levels of Hygienic Integration." *Mental Hygiene*, Vol. XXIV, No. 1. January, 1940.

person without vision—and time to permit a gradual excursion into physical activity in less hazardous ventures. In the treatment of mental patients it has frequently been found that there is value in the psychological aspect of the therapeutic use of sensory levels of experience. The patient who touches an object purposefully comes into direct contact with reality. His behavior, after he has developed some sustained interest in simple activities, is frequently less easily disrupted by his anxieties or his hallucinations. Timid and distracted individuals become more confident and more aggressive in their mental and physical relationships.[1]

With the blind person who is reluctant or unwilling to accept remedial treatment, neither force nor unrealistic promises for the outcome of such treatment are effective. Results may be achieved through careful planning of participation in simple everyday activities in his immediate environment. Gradually, as he develops confidence in himself, his fears may diminish and his adjustment to a wholesome behavior development may increase. He may then not only accept but seek out the medical services that were dreadful to him in prospect at an earlier date.

### Provisions Covering Ophthalmological and Other Assistances

The blind person who is to undergo treatment needs to be assured that he will not immediately become ineligible for public assistance when he enters a hospital. The Federal Social Security Act prohibits the matching of assistance made to an inmate of a public institution. The Social Security Board has interpreted this to mean that an individual who enters a public institution for temporary medical, surgical, or convalescent care does not become ineligibe for public assistance for a reasonable period if medical reports indicate that a plan of treatment is progressing. The Federal Social Security Act likewise places a maximum of $40 on the assistance payment matched from federal funds, and does not permit the use of federal monies by the state agency to pay for treatment. No state is specifically precluded by state law from giving medical care: 27 states have authority to give special assistance for medical care although not all of them have funds for this purpose. Twelve states have no maximum assistance grant; 20 states have a maxi-

[1] Davis, John Eisele, *op. cit.*

mum grant of $30; 3 states have a maximum grant of less than $30; 8 have a specified maximum grant of more than $30, usually with some special provision for the amount of income and assistance an individual may have; 8 states provide that an individual who receives aid to the blind may not receive at the same time another type of assistance, except for medical care or vocational rehabilitation. Within these general provisions many states, regardless of the limitation on federal matching, are attempting to see that an individual receives an adequate amount of assistance to relieve economic tension, to see that assistance is continued while the individual is undergoing treatment, and to see that remedial treatment is provided either through the assistance payment or by direct payment.

There are also special problems of equal importance in after-care of persons whose sight has been restored. New problems are to be faced by the individual who has had his sight restored and seeks to establish himself under changed circumstances. The protection of friendly interest and medical treatment and financial assistance not only need to be continued, but the patient needs to be assured before he undertakes treatment that they will be continued for a reasonable period after recovery. To this end the Social Security Board has said:

> "Substantial incapacity due to blindness may be said to continue after medical treatment until re-examination has established the fact that the recipient has sufficient vision to render him ineligible to assistance. Where reasonable evidence is on record to indicate that plans are progressing for restoration of the individual's ability to be self-supporting, a report of such re-examination may be submitted for review by the supervising ophthalmologist as long as three months after the termination of medical or surgical care to assure that convalescence and psychological adjustment have been complete, and that restoration of vision has in fact been effected."

### Summary of Recommendations

To summarize, the attitude of the Social Security Board toward the prevention of blindness may be reflected in the following summary of recommendations that are being made to state agencies administering aid to the blind:

1. The determination of blindness and direction of medical aspects of programs for work with the blind will be under the guidance of qualified ophthalmologists.
2. Blindness will be defined in terms of ophthalmic measurement.
3. An examination by a physician skilled in diseases of the eye will be given each applicant for public assistance and a satisfactory report filed giving specified data with respect to each examination.
4. Public Assistance agencies will co-operate with public and voluntary agencies in allied fields in treatment and prevention of blindness and will seek to promote the maximum contribution of each agency in its particular area of competence.
5. The advice and co-operation of individual physicians and organized groups will be sought and used in planning and interpreting the work of the Public Assistance agency.
6. Studies of the incidence and causes of blindness will be undertaken under competent direction, utilizing the best scientific tools available, and the results of such studies will be used to plan for restoration of sight or prevention of blindness.
7. Skilled and sympathetic guidance will be given the blind or near-blind in helping them to avail themselves of opportunities for remedial services.
8. Financial assistance will be adequate to relieve economic tension while a patient is contemplating or undergoing treatment and will be adapted, insofar as possible, to the special needs and requirements of the blind person. The costs of paying for treatment may be included in the estimate of individual requirements used as a basis for determining the amount of assistance payment.
9. Service, including assistance, will be continued for a reasonable period after constant use of remedial treatment to contribute to the alleviation of personal and medical problems of the blind.

This, I believe, presents some ramification of the Social Security Board attitude toward prevention of blindness. Within the limits of the provisions of the federal statutes the Social Security Board will participate in the fulfillment of these practices. In the words of Helen Keller: "It will be glory enough if it can be said of us in the future—they were the forward-looking spirits who forced back further the frontiers of darkness that there might be a chance of light for everyone."

# The Place of Medical Social Work in Ophthalmological Services*

Edith M. Baker

PRESENT developments would indicate that medical social workers engaged in eye services may undertake, in addition to case work services, certain broader functions which include administrative, program planning, policy making and educational activities.

IN HER work in the ophthalmological department of a hospital, the medical social worker is concerned not only with the need of the individual patient under treatment, but also with the resources of the medical institution and of the community. All forms of social work in a community are necessarily dependent on and responsive to local conditions, such as the racial composition of the population, the level of education and of income, abundance or lack of medical and social resources, and the basic philosophy of the community in regard to its acceptance of responsibility for the welfare of its disadvantaged members. Of particular importance to the medical social worker serving patients with impaired vision are the provisions made for proper prenatal care; for adequate facilities for the treatment of syphilis; for the prevention of diseases and defects of the eye and for the treatment of those already existing; for vocational guidance; for the training and placement of persons with limited vision; and for public assistance for the blind who are in need. When a community has well-developed health and welfare services, the medical social worker can be more effective in helping patients with their personal problems and attitudes in facing illness or handicap and in assisting them to make use of available resources.

* Presented at Annual Meeting of the District of Columbia Society for Prevention of Blindness, March 11, 1940.

In this age of scientific methods and laboratory investigations, with its ever-increasing number and complexity of tests and diagnostic procedures, the personnel of a medical institution is all too prone to ignore the importance of seeing the patient as well as the disease, of treating him as a whole man rather than as a case of trachoma or glaucoma. The patient is not just a diseased eye. The mind of a medical institution tends to become focussed on the diseased organ and to forget that it is only one member of the body. The medical social worker shares with the physician and the nurse responsibility for individualizing the medical, nursing, and social services to meet the patient's need. Only when there is opportunity for such individualization can there be assurance that the patient will profit as fully as possible from medical care.

When a patient enters a hospital, his personal identity is likely to be submerged. He is frequently referred to, not as Richard Roe, but as "that case of glaucoma in the last bed on the right of the ward." This anonymity may be relatively unimportant in some instances, but in other instances it may be serious if it leads to the patient's being treated only as a case of glaucoma and not as a man facing possible blindness. It is well known that everybody, sick or well, is affected in one way or another, consciously or subconsciously, by the personal and environmental forces that bear on his life, and especially to the sick forces may act as powerful stimulants or depressants. In order to understand the forces affecting Richard Roe, it is necessary to have a clinical picture of him which is not revealed merely through study of his complaints and through physical examinations and highly perfected tests, but which must include, as well, information about the patient as an individual with his family, his home, his work or lack of work, his relationships with others, his hopes and fears. A knowledge of the patient's attitude toward his condition, his understanding of his illness, and his ability to adjust to the handicap which it imposes are parts of the picture. The physician should know, in short, the intimate details of the patient's personality and environment. All this background which bears so strongly on symptomatology needs to be brought into proper perspective. The disease is treated in the hospital, but Richard Roe, lying awake night after night, afraid to face the future, presents a problem that is much more complex than the

pathologic physiology of glaucoma. Treatment may fail to reduce the ocular tension materially when Richard Roe is worrying over his restricted vision, the possibility of ultimate blindness, the prospect of long-continued treatment in the effort to conserve his present vision, and his reduced capacity to work and support his family. The physician knows the interplay of psychological and physiological factors, but he realizes that the admonition not to worry will be of little avail under these circumstances. Richard Roe needs the opportunity to talk with an understanding person about his problems so that he can face the situation that is confronting him and can be helped to assume responsibility for following medical recommendations, and to adjust his manner of living to conform to the limitations this disease may impose upon him. In this relationship between patient and social worker there is recognition of the patient's need and right to solve his own problems to the fullest extent.

In a recent article, Dr. Harry S. Gradle wrote as follows: "One of the major causes of blindness is that dread disease known as glaucoma, hardening of the eyeball. According to locality, 6 to 20 per cent of all known cases of blindness are due to glaucoma. In a large percentage of cases, the disease can be controlled, with resultant preservation of sight, provided the patient continues under ophthalmologic observation and treatment. But the long-drawn-out character of the condition discourages so many that they drop from sight and accept resultant blindness as inevitable. The late Dr. George Derby of Boston recognized these facts and was the first to establish in the Massachusetts Eye and Ear Infirmary a social service exclusively for the purpose of following glaucoma patients as long as they lived. It took us a good many years to follow in his footsteps, but now the rest of the ophthalmologic world is waking up to the necessity for such social service."

Social service departments have been developed in voluntary and in public hospitals largely in response to the desire of physicians to know more about their patients as individuals, and to assist them in making the necessary adjustments as satisfactorily as possible. The value of social study in diagnosis, the essential part that it plays in determining the exact treatment of the case, and its rôle in the prevention of disease and of psychological maladjustments,

both for the patient and his family group, have been demonstrated in the setting of the medical institution. Medical social service is an integral part of medicine itself and is not merely an activity of an allied field of social work. The medical social worker has no monopoly of matters thought of as "social," since each professional person in the hospital—administrator, physician, nurse, dietitian, or other person—is concerned with the social phases of the care of the patient in the course of serving him. Each of these professional persons brings a different body of knowledge, experience, and skill to his task. The medical social worker should bring an understanding of human behavior and of the social environment, a skill in interviewing, a knowledge of the services provided by various organized and unorganized resources in the community, and an ability to mobilize those which may contribute to the care of the patient if appropriately integrated with medical treatment.

The medical social worker uses an approach and a method which differ from those of the physician, nurse, and other members of the hospital staff. She seeks first to understand the particular meaning of the disease and its treatment to this patient, this person, who reacts, always individually, to his illness and to each step in medical care. What are his ideas about his condition? What have been his knowledge of and his experience with this disease in the past? What specific problems does it present to him? Always beginning where the patient is, emotionally and intellectually, and moving ahead in accordance with his tempo, she seeks to help him to understand the situation which confronts him and to do something constructive about it. If there are various choices, she aids him in reaching a decision. If there is an inevitable result to be anticipated she helps him to face and accept it, being careful not to project upon the patient her own reaction to the condition. Always she endeavors to give him sufficient understanding and support to enable him to move through his own initiative, and in the way which seems to be most satisfying for him as an individual and the most satisfactory in his social relationships.

There is probably no handicapping condition which draws forth more intense emotional response than the threat of blindness. This emotional response is potentially either a constructive or a destructive force both to the individual and to the community. The

individual inevitably absorbs and reacts to the social attitudes with which he is surrounded. If the response of others toward the problems presented by restricted vision or blindness is pity, fear, repugnance, or hopeless resignation, the patient with defective eyes invariably not only will be conscious of these basic feelings but also will react to his defect with the same emotional response. In dealing with individuals with defects, we encounter all our own mixed feelings about persons with whom it may be hard for us to feel at ease because their defect makes them different from us. Anxiety over feeling different from others is a fundamental reaction. Many of us do not feel comfortable or at ease with a handicapped person. We may even forget him as a person and think of him and react to him just as a disability. Such feelings explain our clumsy efforts to be natural; in our concentration on just how we should treat the person with severe visual handicap we act as though he belonged to another species.

A visual handicap may create social problems as serious and complex for children as for adults. Children who have a favorable prognosis as far as any permanent handicap is concerned may nonetheless have to undergo a period of temporary disfigurement. A child is acutely aware of any difference which separates him from his group. A child who is handicapped or different in any way excites attention and anxiety. Other children shrink from him because they are afraid of being like him. Because he is a threat to their security they repulse him through physical cruelty or through psychological cruelty, that is, by taunting him or isolating him socially. Parents' reactions to a handicapped child may range from extreme solicitude to rejection. They may feel responsible for his condition and wish to protect him in every way, or they may feel insulted by his disfigurement and wish to neglect him or punish him in other ways. Not every child with defective eyes presents emotional problems that appear to influence the medical situation or the child's adjustment to it. Many children even with serious defects of the eye are able to make a satisfactory adjustment to the limitations which are imposed. However, it is important to understand the meaning to the child of his eye defect and its treatment, and to be sensitive to the social factors affecting him at home, at school, and in the community.

The National Society for the Prevention of Blindness has just issued a pamphlet containing a symposium on "Sight Conservation Through Fuller Understanding of the Patient." It will be of particular interest to social workers and others who are concerned with the care of children who have a temporary or permanent visual handicap.

Because emotional factors may influence the medical situation or the patient's adjustment to a visual disability, it is essential for the medical social worker to examine her own attitudes, to understand what these handicaps mean to her, and to acquire emotional poise about the handicaps of the patients with whom she works in an ophthalmological service. She needs to be constantly aware that her feelings about the visual handicap of a patient affect his adjustment to his disability much more than her actions toward him. She is concerned not only with the medical care directed toward restoration of as much visual power as possible, but also with the individual's capacity to adjust to the limitations of an ocular handicap and to make maximum use of the remaining function. In order to assist these patients to change the way they feel about themselves so that they can utilize the services she brings and meet their life circumstances more adequately, the medical social worker must relate herself to them as personalities and not be obstructed by her reactions to their handicaps.

In addition to her case work with patients who have defective vision, the medical social worker is concerned with the response on the part of the public to the emotional appeal of blindness and of the possibility of preventing blindness. The force generated in this manner has power to raise money, to provide services and facilities needed in the community, and to secure socially desirable legislation, but it needs organization and direction if it is to be expended constructively. Such a worker is fortunate indeed if she is working in a community which has a well-developed program for the prevention of blindness. She is assured then of leadership in planning for the many diversified services that are needed in any community to meet the problems associated with the conservation of vision. She realizes that it is important for her to know about and to work co-operatively with every educational, vocational, industrial, wel-

fare, and health agency—local, state, federal, or national—whose services are available for persons with visual defects.

The factors which influence the welfare of the individual with impaired vision, and which determine the effectiveness of a program for the conservation of vision, are almost limitless. Only a few have been mentioned here. The medical social worker needs to keep herself informed of current thinking in regard to such matters. The literature on the subject is impressive. A timely article of particular significance to public health nurses and social workers has been written by Dr. Arthur M. Yudkin, "Nutrition As It Relates to the Eye." In this paper he states: "It seems obvious that not only the general health of the body but even that of the eye can be affected by faulty diet. Like many other parts of the body it can share in any strain placed on the organism by an insufficient supply of various dietary essentials." Application of this statement to a particular situation may show that there has been lack of food or a faulty selection of food. In any community where the levels of relief and assistance are low, the presenting need of the patient with impaired vision may be for help in obtaining food, and even shelter. In such instances much of the social worker's efforts may be directed toward meeting these basic physical needs before she can help the patients with their personal problems and attitudes in facing the limitations imposed by a visual handicap. The effect of such a community situation, with its predominating pressure to meet an economic need, may be to obscure or divert the less tangible but important contributions which medical social work might make to individuals with defective vision.

Present developments in the fields of health, welfare and education suggest that the medical social workers engaged in ophthalmological services and in programs for the conservation of vision may undertake, in addition to case work services, certain broader functions. These important broader functions may include administrative, program-planning, policy-making, and educational activities. It is social case work practice, however, that builds up the body of knowledge, tests methods, and develops a broad point of view, and such elements, which seem to be the very essence of the medical social worker's contribution wherever she functions, should have

wide application in these developing programs. The need for such activities is likely to increase rather than diminish. The emphasis now being placed in the different states on the various social phases of work for the blind and for the prevention of blindness will determine to a great extent what the contribution of medical social work to these programs will be in the immediate future.

# Editorial

## Blindness from Glaucoma Can and Should Be Prevented

IT IS one of the happy provisions of nature that no one is ever called upon to bear the accumulated sufferings of mankind. If he were, the burden would be intolerable.

When we read of mass blindness following injuries and diseases, our emotions are excited for a moment, but almost at once other interests seize our attention, and our sympathy ("sym" meaning with, and "pathy," feeling)—that is, the feeling with another—has passed away. It is only when we are brought into touch with actual instances of blindness that the dreadfulness of the tragedy is realized.

When we see a strong man, the wage earner of his family, vainly groping in the bright daylight for the chair which is directly before him, upsetting the glass of water on the table because he cannot see it, led on the streets by a little child—then and then only do we feel the magnitude of the disaster that has befallen him. Multiply his personal suffering by hundreds and by thousands, and we begin to understand the misery that ignorance and negligence and indifference have brought upon humanity; and then we know in some measure what the Preacher meant when (to paraphrase) he spoke of "the evil days when the light and the sun and the moon and the stars are darkened, and there is no pleasure in them."

Of all the blindness existing, even more than one-half of it would never have occurred if the right thing had been done in the right way, and at the right time. The responsibility rests upon each one of us for the prevention and control of the blindness that need not have been.

We have grown used to hearing about the number of eyes lost through accidents in industry, and of those that have been destroyed through syphilis and tuberculosis, but we hear little or nothing of a disease that takes more eyes than any of these, and that is GLAUCOMA. It is a mysterious disease. It is peculiar to no locality, and to no social class. We do not, as yet, know its origin.

We know only that something occurs that changes the pressure within the eyeball so that, instead of being elastic and resilient under the touch of the fingers or the more sensitive instrument that is employed, it becomes hard and tense, and that this occurs often —both subtly and insidiously. Because of the quiet onset with which it is ushered in, its recognition is overlooked, and too often it happens that when aid is sought, the time in which help might be effectively given has long since passed. But while the cause of glaucoma is one of the problems of medicine today, and more research is constantly being given to it, the conditions that aggravate it—that increase it—that hasten or retard its development—*are* known, and these can be met and overcome only in its incipiency.

*Our hope for the control of glaucoma lies in its early recognition.* Professor deGrosz, one of the notable Hungarian eye surgeons, in an address given last year before the Hunterian Society in London, reported that during the 31 years in which he was head of the Eye Institute in Budapest, he operated on 4,326 patients for glaucoma, and out of these only eight per cent came to him during the first week after the manifest beginning of the disease, and only 13 per cent within the first month. Others trailed along, many of them months after all possible hope of relief had gone by. What happened in this great clinic—one of the best known in Europe—is happening throughout the world today. That is, the failure to recognize the oncoming of the disease—usually controllable in its beginning, but hopelessly fatal to the sight after deep organic changes have taken place in the structure of the eye itself.

Glaucoma is discoverable before the sight is affected, and protective treatment should be instituted at that time. It is one of the most prevalent causes of blindness throughout the world today. If it can be helped—*and it can*, often without operation, in its early stages—why is this not done? Chiefly because no organized measures have been taken to acquaint the public and the medical profession generally with the early symptoms and dangers of the disease. We cannot avoid that about which we know nothing. The early symptoms are often overlooked as transitory and unimportant. When the glasses worn seem to be wrong, and patients go from one doctor to another, trying to improve them—when there is discomfort in the use of the eyes, and there are halos around the

light at night, and the eyes are occasionally painful without apparent reason—when night blindness makes it difficult to see in the evening—skilled advice should be sought to determine whether or not these symptoms are menacing ones. If neglect of a serious condition is due to ignorance on the part of the public, this can be met. The health boards throughout the country, the American Medical Association with a society in every county, and the National Society for the Prevention of Blindness, should combine in public meetings to make popularly understood the dangers of this disease, the name of which as well as its threats to sight are known to comparatively few. The radio and the press are other means through which information might be conveyed. It is said that losses in industry cost the country more than ten millions of dollars annually in compensation. The losses from glaucoma amount to more than those in industry. We ask our health and medical societies generally to unite with us in setting in motion such measures as will protect the public from disasters so saddening and costly.

—PARK LEWIS, M.D., F.A.C.S.

# The Forum

**THIS section is reserved for brief or informal papers, discussions, questions and answers, and occasional pertinent quotations from other publications. We offer to publish letters or excerpts of general interest, assuming no responsibility for the opinions expressed therein. Individual questions are turned over to consultants in the particular field. Every communication must contain the writer's name and address, but these are omitted on request**

## Sun Glasses

At this season of the year, one of the most frequent questions asked of the eye physician is, "Are sun glasses necessary and, if so, what type do you advise?"

There are so many different types of sun glasses sold under so many different names, many of which are very similar and produce the same effect, that it is easily understood why the public may be in a dilemma. First of all, the material in this article is confined to sun glasses and does not include protective glasses required in industries nor the tinted glasses which are prescribed as a part of the treatment of eye diseases.

The past summer, a fad of wearing colored glasses was created by movie stars and other prominent persons who got behind the smoked goggles at first to hide, and then continued to wear them because of the air of mysterious glamour they afforded. The more hideous and streamlined were the blinders, the smarter they were considered and many girls had different colored ones to match their wardrobes.

Until a few years ago, the claims of some of the manufacturers in their advertising literature were full of exaggerations and often untrue. Due largely to the efforts of W. W. Coblentz for the federal Bureau of Standards, the advertised statements are more nearly correct today, and some standards have been set.

Inferior quality sun glasses are sold in almost every drug, cigar, and five-and-ten-cent store. They are made from celluloid, poor blown or pressed glass, are defective, and will add irregular astigmatism, myopia, hyperopia, or prismatic imbalance to the refractive mechanism. Consequently, they only increase the strain produced by the glare. One state prohibits the sale of these cheap glasses. The best

advice to give on this score is: Buy your sun glasses from a reputable optician and insist upon good quality ground and polished protection lenses, and, if necessary, ground with your correct distance prescription.

Why do persons wish to have sun glasses? The logical answer is: They wish to protect their eyes from glare. And what is glare? It may be defined as any brightness within the field of vision of such character as to cause discomfort, annoyance, interference with vision, or eye fatigue. Glare is unwanted light.

Scientifically speaking, the best sun glass is one which absorbs the ultraviolet and infrared rays, and partially and evenly absorbs the colors of the spectrum so there will be no change in the color scheme of nature. But for practical purposes, we need to worry about the infrared rays only in industrial glasses, and it is doubtful if the normal amounts of ultraviolet rays are harmful; in fact, they are beneficial. When one considers that most objects are viewed in reflected light and that as a general property they (except snow) highly absorb the ultraviolet rays, the latter seem to be of minor importance. For sports wear, the distortion of shades of color makes little difference.

The object of the manufacturers in making sun glasses of different materials and colors is to absorb the rays of the spectrum uniformly. The distinguished scientist, Sir William Crookes, worked arduously on the lenses that bear his name—"Crookes" lenses. He was the first one to perfect a composition of glass that would absorb ultraviolet rays. Moreover, in sun glasses, "Crookes" glass displaced nearly all others as the lenses did not alter color values. A yellow canary was still yellow and a white sail was still white when perceived with "Crookes" lenses. Prior to the advent of these lenses, a white sail was amber when looked at with amber sun glasses, and green with green ones, and so on.

While "Crookes" glass was in great demand for many years, it had some detriments. Some objected to the depth of color. Also, the glass precluded the desirable or yellow rays, thus distorting colors. And lastly, there is no standard for "Crookes" glass; thus, poor quality "Crookes" glass may be made.

To overcome these objections, one American company set their scientific staff to work on producing glass that would transmit the desirable band of the spectrum and have less depth of color or shade and one that would blend with the human skin. The result of that endeavor was "Cruxite" glass, obtainable in four shades. Sun glasses of "Cruxite" glass are not obtainable "ready-made"—only on prescription. The latter is also true of "Soft-Lite" lenses obtainable in four shades. The makers of these claim that "Soft-Lite" tones down the en-

tire spectrum an even amount, though they do not cut down the ultraviolet rays. Similar in spectral transmission are sun glasses made with "Velvet Lite," "Aninfra," "Fieuzal," "Neophan," "Azurine," and "Macbeth Daylight" glasses are also made to fill out the color scheme. Many ophthalmologists agree that the old-fashioned "London-smoke" glasses serve the purpose of a sun glass as well as any other.

In the past few years, sage-green sun glasses have become quite popular. They are called "Chromat," "Ray-Ban," and "Calobar." These are trade names of different makers of lenses of almost the same glass ingredients. They are very fine glasses, are standard for the United States Army Corps, are largely used in aviation, practically completely absorb the ultraviolet and infrared rays, and cause no color distortion.

The latest type to become popular is "Polaroid" sun glasses in neutral and green shades. The lenses of these are laminated. Between the two fine sections of glass is a thin sheet of plastic in which billions of needle-like crystals are imbedded, all parallel to one another. These crystals "comb out" the light vibrations passing through them. The advantage of "Polaroid" lenses is that they absorb the horizontal light waves which make up most of the reflected glare. An early disadvantage which is being corrected this year is that the plastic material often was wavy. Previously they could not be ground with a prescription but this is now possible, although quite expensive.

So far we have said nothing about the individuals who have a poor tolerance to normal lighting conditions. Lehrfeld in a thorough study describes this as a physical allergy to light. Don't confuse this with the allergy that causes hay fever and asthma. No doubt the faint shades of tinted lenses are a help to a small proportion of individuals, especially nearsighted ones with large pupils who cannot tolerate normal illumination.

Many people, in long distance auto driving, suffer headaches and eyestrain which they believe can be corrected by sun glasses. Some people who are sensitive to light have some refractive error or some other source of eyestrain. Hence, in many cases, glasses skillfully correcting the refractive error relieve most of the cause of subnormal light tolerance, which is the complaint of the majority of persons wearing tinted lenses.

Some advice which may save you trouble is that sun glasses are designed for day wear and should not be worn for night driving as they lower the visibility too much. As yet, no glass has been made which will overcome the glare of auto headlights and still be safe.

We have heard considerable criticism of sun glasses to the effect that they become habit-forming. Just

what is meant by habit-forming is not clear. Certainly they will not cause an atrophy of the color sense. However, if worn unnecessarily and continuously they may lower one's tolerance to light and instigate a discomfort in moderate illumination.

In choosing a sun glass, remember that all good quality absorptive and sun lenses on the market are of value and will serve your purpose as a glass for beach, snow, and bright summer day wear. The type depends upon the particular purpose for which you require them, and the depth of shade will depend upon just how sensitive you are to glare. When you are buying a pair of sun glasses, step outside on the sidewalk and try them on to see if they will suit your purpose.

And now to answer your most important question: "How much should I pay for a safe sun glass?" Satisfactory ones of good workmanship can be purchased for from $1.00 to $3.00. These prices are without your prescription. Very fine lenses, such as "Calobar" and "Ray-Ban," ground with your prescription, cost $3.50 in addition to the price of a white lens. "Polaroid" without prescription are $1.95, as a goggle (toric) $6.00, and with prescription (toric) $15.00 minimum.

To recapitulate, sun glasses are desirable to be worn when you are in the bright sun, never for night driving. And when you are not in the bright sun, in the best interests of your eye health leave them off. Your choice of shade will depend largely upon the use to which you wish to put them, and the color you prefer is a personal matter.

In a survey which I have made of a representative group of ophthalmologists throughout the country, the results show unanimous agreement that sun glasses should be worn only in the bright sun. Fifty per cent are of the opinion that they may be harmful if used otherwise. Furthermore, all the eye physicians agree that only ground and polished glasses should be worn. Twenty-five per cent have no preference for any particular type. The balance of the oculists had various choices about evenly distributed among "Calobar," "Crookes," "Cruxite," "London-smoke," "Macbeth Daylight," "Polaroid," "Ray-Ban," and "Soft-Lite," which indicates that no one particular sun glass has any proved definite advantage over the rest.

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## Sight Saving With the Chinese*

As one may readily imagine, teaching in a sight-saving class in San Francisco's Chinatown is extremely interesting. Although San Francisco is a very modern and progressive city, its Chinatown has

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maintained an atmosphere of the Far East. In reality, it is a foreign village within the city. The Chinese have their own temples of worship, their own doctors, herb lists, nurses, hospital, day nurseries, clubs, social organizations, labor unions, shops, markets, restaurants, theaters in which the presentations are in Chinese, and schools for providing Chinese education. In Chinatown, the Chinese language is used almost exclusively in spite of the fact that a fairly large proportion of the adult population of Chinatown has been graduated from San Francisco public schools.

Chinatown's existence as a separate entity in San Francisco is not wholly self-imposed. There are first, the barriers to racial assimila, tion; second, the city has restricted Chinatown to a district of approximately eight blocks by three blocks, housing from 17,000 to 25,000.

Language is the major problem confronting teachers in the San Francisco public schools in Chinatown. Chinese children entering the schools have little, if any, knowledge of English. This language difficulty is indeed a problem, complicating the presentation of each subject in the curriculum. Chinese is a very ancient language; its written characters are a modified form of picture writing. Chinese verbs are all in the present tense; subject and object pronouns are expressed by the same character; there are no articles. Plurals of nouns are formed by stating the number of persons or things referred to—unless the adjective "many" will serve the purpose. These and other characteristics of the Chinese language explain the sometimes amusing utterances of the Chinese as they translate literally their thoughts into English: this literal translation results in "I (or me) no like;" "Girl all time very quiet." There is an expression, "One must learn to sing before speaking Chinese." The language abounds with tonal qualities. If a word is pronounced in one way it means "mountain"; in another way it becomes the verb, "close." Incidentally, I have been told by some of my friends that my own English has acquired a rather sing-song quality.

In addition to the fact that Chinatown is exceedingly overcrowded, much of its population lives in straitened circumstances. Definite problems in the field of health result from lack of air, light, sunshine, proper diet, adequate living facilities, and recreational activities. In the interior of China, vegetables in plenty, unpolished rice, and the chaff of grains provide a satisfactory diet. Although the Chinese contend that their diet in San Francisco's Chinatown includes all of the necessary vitamins, it will usually be found that they consume a great amount of polished rice, that they have adopted mainly our starchy foods, eat few vegetables and fresh fruits, use no butter and drink no

milk, with resultant lack of Vitamin A. Milk seems to be in great disfavor with the Chinese. As a matter of fact, it is not drunk in China; the Chinese seldom drink anything that is cold.

In Chinatown one rarely sees children at play on the streets until after eight or nine o'clock in the evening. The majority of our Chinese pupils, after their public school day from nine in the morning to ten minutes past three in the afternoon, attend Chinese school—the primary grade children from 4 P. M. to 8 P. M. and those in the upper grades from 5 P. M. to 9 P. M. Although their families compel them to attend, the Chinese children themselves seem to have an innate love for China and everything Chinese. The schools are conducted according to a course of study sent from China, and the curriculum includes reading, writing, history, geography, literature, music, and instruction in the use of the abacus. The children arrive home from American school, stop to eat rice, then gather their books and brush and ink, and are off for Chinese school.

The most unfortunate factors in this program are the lack of opportunity the children have to play in the sunshine and relax in the fresh air, and the excessive demands made, especially on their eyes. The hardship of such a program, superimposed on unsatisfactory living conditions and dietary deficiencies, is obvious.

In China, the science of ophthalmology can be traced back to the Han Dynasty, 250 B. C. This would seem to imply that the "silver sea," as the early ophthalmologists called the eye, has long presented a problem to the Chinese. Some historians attribute the invention of the eyeglass to the Chinese. Medical journals of the Ming Dynasty describe procedures for excision of "Nu Jou," or protruded flesh, which may refer to pterygium or granulation tissue. They also describe the "golden needles" used for removing cataracts. The ancient Chinese medical profession considered the eye as directly connected with the liver, and the kidneys were supposed to be connected with the pupil through which the tears flowed. It is interesting to note some Chinese remedies for visual defects: eyeballs, especially from nocturnal animals, if rolled in sugar and swallowed whole, are reputed to improve vision; if the entire eyeball is not available, the cornea of an animal's eye is considered beneficial. Wildcat soup and owl soup are considered nourishing for weak eyes. Shark fins also are said to have properties for strengthening eyes. There are small, orange-colored berries, procurable at herb stores, that contain soft seeds which, eaten raw, taste like dried apricots. These berries, eaten in a stew of pig liver and lean pork, are said to be capable of strengthening visual acuity. A popular household remedy for poor eyesight is a stew of snails

and garlic. One of the beliefs of ancient China was that eyesight improved if one arose early and went to a hillside to watch the sun rise. Perhaps the idea back of this was that one would then, of necessity, go to bed early instead of working or reading in the poor illumination the Chinese endure.

Faith in such remedies may seem incredible, but many Americans buy "cure-alls" by name, not even knowing the ingredients.

Myopia is very prevalent among the Chinese, both here and in China. Why this is so is not understood, though racial and familial tendencies, diet, posture, and inadequate illumination are considered possible contributory factors. A Chinese oculist whom I questioned proffered the theory that the frequency of myopia in the Chinese was due to an embryonic overdevelopment of the epidermic layer from which the eye is formed.

My sight-saving class is almost exclusively Chinese. In general, the routine is similar to that followed in other sight-saving classes; but in my class progress is, perhaps, I might say, rather hour-glass fashion, the existent language limitation representing the small aperture through which all information has to pass. I have greater need for individual instruction, particularly in reading; but even in the upper levels of the elementary grades, geography, history, science—in fact, all subjects of the curriculum—have to be presented in the simplest possible language.

In addition, problems in the field of health and hygiene are, I am sure, more acute and definitely more difficult to cope with. Classification of pupils is obviously not simple. Chinese children do not enter wholeheartedly into play activities; they appear not to be inherently athletic, although this may be an evidence of their need of physical rest. Institution of a functioning guidance program in Chinatown is difficult. Often neither parent can speak English, both work all day, and living and recreational conditions are unsatisfactory. This description, of course, is not applicable to all of the Chinese in Chinatown. Many of the Chinese attain admirable records in our schools and colleges and make excellent progress in the professions and business. The mass population, however, with meagre opportunities for education, work in laundries, factories, stores, barber shops, beauty parlors, shell shrimps, cook, or work as domestics; in the East Bay district and on the Peninsula, there are opportunities for truck gardening, fishing and farming.

I wish I could present my class to you. Seeing them would convince you not only of their intrinsic "Chineseness," but of the pleasure and fascination that ensue from contact with them.

ANN MCHUGH
San Francisco, Calif.

## International Work

Mention was made in the National Society's annual report of the award of a gold medal to Dr. Park Lewis, and a medal to Mr. Lewis H. Carris on the occasion of the tenth anniversary of the foundation of the International Association for Prevention of Blindness. Since then, in the words of the Rockefeller Foundation's report, night has fallen over Europe. One felt anxious at first lest the results of ten years' labor might be engulfed in the catastrophe. However, we are thankful to say that this has not been so. Engagements abroad had to be cancelled and plans for an international meeting in the near future were postponed. A most promising scheme for granting a thousand-dollar honorarium for research work on glaucoma—a powerful cause of blindness, against which we are to a certain extent unarmed—has been in abeyance, owing to the fact that on this side of the Atlantic the majority of young doctors and scientists had to give up their usual pursuits.

However, in other fields the Association's work has not been hampered. The *Journal of Social Ophthalmology* continues to be published twice a year; it will temporarily include as a supplement the *Revue Internationale du Trachome*, a publication of fifteen years' standing. The *Revue* is more definitely scientific than the *Journal* which is meant, like THE SIGHT-SAVING REVIEW, to be read by all. One must hope that this valuable addition will not alter the spirit of the *Journal*, and that the supplement, which is to be printed in English and French, will be adapted to its new and wider audience. In other respects one should hail as a happy event this sign of a closer collaboration between the International Association for Prevention of Blindness and the International Organization Against Trachoma. The latter disease is responsible for much blindness and misery in Northern Africa and the Far East. Except that it is a more widespread, mysterious, and treacherous disease than most other causes of blindness, there is no reason why it should be kept separate from its congeners in the general scheme of prevention.

The Association's secretariat is receiving from all parts of the world a steadily increasing number of periodicals in exchange for the *Journal*. Another interesting point is the growing amount of references to the preventive aspect of ophthalmology in a number of scientific publications. This is a direct effect of the Association's educational campaign. However, it should be added that for work which is so vital, with associations in so many fields, with such far-reaching implications, these references appear sometimes to be monotonous—a mere repetition of propaganda slo-

gans. What is the real reason for this lack of originality and vigor? Perhaps the international nature of the watchword. At home, an idea means facts, sympathies to be enlisted, obstacles to be overcome. It has a kind of national personality which it is bound to lose in crossing the frontiers which divide its native land from other countries. Well, the main point is that the idea should get across the footlights. Once it has settled in a different part of the world, it acquires, after some time, color and life from its new surroundings.

With the publications received in exchange for its *Journal*, the Association's secretariat is building up the nucleus of an international library. This will include periodicals and works directly or indirectly connected with the prevention of blindness. In this scheme, the Association has a valuable ally in the International Union against Tuberculosis, with whom it shares its premises and personnel.

Among the literature issued by the Association, special mention should be made of the French edition of the report on "The Number of the Blind and the Protection of the Eyes in Different Countries." This report, edited in Cairo, is a late by-product of the Fifteenth International Ophthalmological Congress. It is a token of the keen interest which preventive action has aroused in Egypt, one of the countries where the scope for such work is almost unlimited. The report includes surveys made in 37 countries, and gives a fair idea of the actual state of affairs on the eve of the war. It shows both the distant ramifications of this complex problem and its changing aspects in the various nations.

With war raging at our doors, and the fate of Europe hanging in the balance, it may be wondered whether these considerations are not to some extent futile. Undoubtedly, for the time being, they seem unable to stem the surging tide of anxiety in the human heart. However, personal feelings must be disregarded; it is our duty to look ahead and to prepare for the future.

America, which has played a leading part in this vital work, can do a great deal in helping to preserve what can be saved, and in keeping alive the spirit of the Association until times are more propitious.

DR. P. BAILLIART

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Paris, France

# News of State Activities

**THIS Section is devoted to the reporting of sight conservation activities carried on by official and voluntary agencies throughout the country. It presents information supplied by these groups, and serves as a medium for exchange of experiences. Brief and timely items only can be used, because of the limitations of space**

## Colorado

"During the month of May, the Division of Maternal and Child Health of the Colorado State Health Department has held two eye clinics. No more clinics will be conducted now until the opening of the schools in the fall. The policy regarding the organization of eye clinics has been somewhat changed in these last two clinics, in that counties where clinics are held are now participating financially to some extent. A total of 422 children were examined in these clinics, while 175 of the medically indigent group were refracted, and local arrangements made for glasses.

"During the coming fiscal year, the policy will be to return to counties where clinics have been held previously, in order that additional cases may be examined, and a more thorough re-check and follow-up service be given. Colorado's sight conservation program is working out to the satisfaction of all concerned, and the co-operation of local, educational, welfare, and civic groups, along with the State Ophthalmological Society, is most gratifying."

*—Director, Maternal and Child Health, Division of Public Health, State of Colorado, Denver, Colorado*

## District of Columbia

"Continuing to stress vision testing as one of our major activities, we have nearly completed a survey of the Washington parochial schools, carried on in co-operation with the school medical inspection service of the health department. A volunteer committee of 39 mothers of parochial school children has been instructed and supervised by Mrs. Spencer, executive secretary of the Society, and has worked faithfully and energetically throughout the school

year. As a result of this project, we shall discover the children with visual defects, who will then be referred to the health department, and we shall also locate the children who are in need of the special advantages of sight-saving classes.

"Although final results will not be known until the schools close, at the present time 20.9 per cent of the several thousand children tested have been found to have vision below normal. In contrast to this distressingly large number, we have found, through wide experience in testing preschool children, that in the latter group about 10 per cent have subnormal vision. Is it possible that discovery of visual defects at the preschool level would produce a lower number during the grade school years? In any case, there can be no question regarding the efficacy of vision testing as an important phase of conservation of vision."

—*District of Columbia Society for the Prevention of Blindness, Washington, D. C.*

### Illinois

"In February of 1939, the Illinois Society for the Prevention of Blindness opened a glaucoma clinic at the Illinois Eye and Ear Infirmary in Chicago. A study made just previous to the opening of this clinic at the Infirmary showed that only 2.8 per cent of the glaucoma patients at that institution returned for observation and treatment. The Society opened the clinic on a demonstration basis, hoping that in two years' time the State Department of Welfare would take over the clinic on its budget. Of the money required, $2,500.00 was raised from the Otho Sprague Foundation; $200.00 from the Chicago Community Trust; and $200.00 from the W. P. Murphy Foundation, plus additional funds from the Illinois Society for the Prevention of Blindness. A medical social worker was sent to St. Louis for training, and the clinic was opened on February 1, 1939.

"Since that time, 623 patients have been registered at the clinic —of which only 22 have failed to return for observation or treatment. Of the 623 patients registered at the clinic:

"35 are now receiving intensive social service.
104 are receiving minor services.
53 are inactive (they are either too old or too incapacitated to need much care, or their vision is below the blind pension level and therefore the prevention of blindness angle is no longer important).
335 are active for follow-up.
95 have been discharged.

"The Illinois Society for the Prevention of Blindness proposes to take steps during the fall of 1940 to prevail upon the Department of Welfare to include this clinic in its next budget for the Illinois Eye and Ear Infirmary. If they do not do this, the Illinois Society will continue to carry it for the next two years. The Illinois Society is also co-operating this year on the organization of a state medical advisory committee, and is giving a series of lectures in the six normal universities of the state."

—*Executive Secretary, Illinois Society for the Prevention of Blindness, Chicago, Illinois*

### Kansas

"*Minutes of Committee on Conservation of Eyesight of the State Medical Society.*—A meeting of the Committee on the Conservation of Eyesight was held in Wichita on February 4. Members of the Committee present were Dr. Lyle S. Powell, Lawrence, Chairman; Dr. H. L. Kirkpatrick, Topeka; Dr. Wm. M. Scales, Hutchinson; Dr. George Gsell, Wichita, Dr. J. F. Gsell of Wichita, and Clarence Munns were also present.

"Dr. Scales presented a report concerning a questionnaire he forwarded to all Kansas eye, ear, nose, and throat specialists in regard to whether they would favor the presentation by the Committee of a postgraduate course for eye, ear, nose, and throat practitioners. Dr. Scales reported that he had received 38 replies in favor of a course of this kind and only four opposed; that the majority felt the course should be presented at a central place in the state; that it should be three or four days in duration; that half of the course should be devoted to eye and half to ear, nose, and throat; and that 38 of the 41 favored a self-financed course with a fifteen- or twenty-dollar registration fee. Upon a motion made by Dr. Gsell, and carried, it was decided that Dr. Scales should continue his investigation on this subject, and that the Committee would plan to offer a course of this kind next winter.

"Dr. Janney, who was unable to attend, had forwarded a report of his investigation of the possibility of holding a Committee-sponsored eye, ear, nose, and throat postgraduate course for general and other practitioners. Following discussion of Dr. Janney's report it was decided upon a motion made by Dr. Gsell, and carried, that a suggestion should be made to Dr. Janney that he forward a bulletin in the name of the Committee to the county medical societies offering the services of speakers on eye, ear, nose, and throat subjects, and that this plan be utilized as an experiment to determine the interest, in courses of the kind, of the profession.

"The subject of sight-saving classes was discussed, and Dr. Gsell

was asked to continue his joint efforts with Mr. LeRoy Hughbanks in this connection.

"Dr. Kirkpatrick reported that he and Mr. Hughbanks are at present considering ways and means to improve the medical forms being used by the Division of the Blind of the Kansas State Board of Social Welfare, and that he felt it would be possible to improve these in certain respects. A letter from Mr. Hughbanks was presented, asking the advice of the Committee on a suggested bulletin, describing the examination and treatment procedures under the Kansas blind program, which the Kansas State Board of Social Welfare plans to issue in the near future. Several suggestions were approved by the Committee, and the central office was instructed to communicate these to Mr. Hughbanks.

"The question of approval of ophthalmologists for participation in the Kansas blind program was discussed, and the Committee expressed itself as being in favor of the present plan now being used in that regard."

—*Committee on Conservation of Eyesight, Kansas Medical Society, Topeka, Kansas*

### Louisiana

"*Fireworks Legislation.*—Our Society has given the problem of fireworks accidents a great deal of thought, and though we have conducted an unremitting campaign in an effort to eliminate accidents from this cause, we are short of our goal. We have come to the conclusion that statewide legislation, prohibiting the unregulated use of fireworks, is imperative. We have been generally credited with having a New Orleans city ordinance passed more than two years ago. This ordinance was passed as the result of a deluge of protests—entirely justified, in our opinion—caused by the reckless abandon with which fireworks were generally used throughout the city in connection with the celebration of Christmas and New Year holidays. During the holiday season—due to the carelessness and, in many cases, the actual viciousness with which firecrackers were generally used—there were hundreds of injuries which typified the essence of horror.

"In 1936, and again in 1939, our Society sponsored statewide legislation to prohibit the unregulated use of fireworks. This legislation met with defeat, the legislators amiably but stubbornly clinging to the idea that if such legislation were enacted, it would deprive children of a great deal of pleasure. All along, it has been difficult to make the lay mind associate danger with anything appearing so harmless as firecrackers. Undaunted, a study of fireworks legislation in other states was begun at once. A further study was made of statistics showing marked reductions in the number

of accidents after enactment of such legislation in various states and cities. We are again sponsoring a fireworks bill which will extend to the state, if passed, the same provisions against the use of fireworks embodied in the ordinance adopted by New Orleans—which ordinance has brought blessed relief from nerve-shattering racket and from the terrors and suffering of needless accidents in observance of its holidays. Our legislation has been favorably reported by the House and Senate committees, and will be up for a hearing before both houses within the next few days. There has always been a genuine desire and willingness on the part of local people and organizations to co-operate cordially and openly with us in this measure. The Louisiana Parent-Teacher Association, American Legion, American Legion Auxiliary, and the Women's Citizen League have all supported this bill. We believe any opposition similar to that which previous legislation has met will ultimately be withdrawn, for we know that it is sound from both an economic and a humanitarian standpoint.

"*Blood Tests for Pregnant Women.*—We have actively supported the 'Baby Health Bill,' which provides for prenatal tests for all pregnant women. A committee from our Society has participated in meetings held for the purpose of drawing up this bill, and of creating interest in it. This legislation, if enacted, is bound to prevent much blindness in Louisiana, and we believe it deserves support of enactment on the strength of probable benefits. We know that if the syphilitic germ is discovered in pregnant women, prompt treatment may save the babies' lives and greatly improve their chances of sound bodies and normal health. A study of the cause of blindness of 700 cases in Louisiana shows that, in 106 or 15.1 per cent of the 700 cases, syphilis was the cause of blindness; and 29, or 4.1 per cent, were blind from gonorrhea. Enactment of this legislation will mean that prevention of much of that dreadful toll is a blessing within reach of Louisiana and its mothers, by the prenatal test imposed in the bill. This bill has passed all committees and will come before the House and Senate for final action this week. We know of no reason why anyone should want to oppose its passage.

"*Co-Operative Agencies.*—It has been the privilege of our Society to enjoy close co-operation with the joint child welfare department of the American Legion and American Legion Auxiliary. A standing committee on the preservation of vision was appointed several years ago and is still most active. We were particularly stimulated by their 1940 report of prevention of blindness work, which was given at the state convention in Shreveport. An analysis of their work follows:

'Several eye clinics were conducted during the year. Public health nurses and doctors co-operated by giving preliminary eye tests to 720 children. Out of this number, 120 were found with eye difficulties. All of the children with eye difficulties were taken to oculists and have been given the necessary care. Of these children, 31 were furnished with glasses. More than $350.00 has been spent on sight conservation during the year.'

In addition to the remedial work which has been done by the child welfare departments of the Legion and Auxiliary, ten department units have given prevention of blindness programs at their meetings."

*—Louisiana Society for the Prevention of Blindness, New Orleans, Louisiana*

### Minnesota

"The Minnesota Society for the Prevention of Blindness, which was incorporated last summer as a non-profit organization, has been conducting an educational campaign by means of the radio throughout the state. This program has been under the direction of Mr. J. C. Lysen, Superintendent of the School for the Blind at Faribault, who is serving as the acting executive secretary of the Society. By the end of May, 15 broadcasts were made. Practically all of the broadcasts have been in the form of interviews, and have featured men and women who are outstanding in Minnesota in the educational, welfare, and medical fields."

*—Minnesota Society for the Prevention of Blindness, St. Paul, Minnesota*

### Missouri

"The committee on conservation of eyesight of the Missouri State Medical Association introduced a resolution at the annual state meeting, requesting its delegates to the American Medical Association to introduce a resolution before the house of delegates of that body, calling for a nationwide program on conservation of eyesight on the part of the medical profession. This resolution was passed by a unanimous vote of the Missouri State Medical Association's house of delegates.

"The committee also introduced a resolution before the house of delegates of the Women's Auxiliary of the Missouri State Medical Association, requesting them to use the subject 'Conservation of Eyesight' during the year in the essay contest that is competed for by all of the high school students in the State of Missouri. This

subject could be used in statewide competition in every other state in the Union, by each auxiliary."

*—Committee on Conservation of Eyesight, Missouri State Medical Association, St. Louis, Missouri*

## New York

"*Course in Eye Hygiene.*—The course entitled 'A Survey of Eye Conditions' (four points credit), to be conducted by an ophthalmologist, will again be available to students planning to attend New York University, summer session.

"This course has been offered by New York University since 1932 in co-operation with the Bureau of Services for the Blind, New York State Department of Social Welfare. Material offered in this course designed for workers in the fields of education, social welfare, nursing, and allied fields, aims to give a knowledge of eye conditions as related to problems of general health and welfare with emphasis on the need for sight conservation and preventing blindness. (It is the conservative opinion of leading ophthalmologists that 75 per cent of blindness is unnecessary.)

"For program giving outline of lectures please write to: Miss Ruth McCoy, Bureau of Services for the Blind, New York State Department of Social Welfare, 205 East 42nd Street, New York City.

"*Statewide Fireworks Campaign.*—Since the Fireworks Ban Bill signed by Governor Lehman April 12, 1940, will not be effective until August, 1940, we are again ready to participate in the general campaign against needless Fourth of July accidents caused by the use of fireworks. Our poster, 'Watch Out for Your Eyes,' is ready for distribution. As you know, many fireworks accidents occur weeks before the Fourth of July. Can we send you a supply of our posters to help you in giving your community an early warning against needless Fourth of July accidents? These posters will be mailed postage free."

*—Prevention of Blindness Service, New York State Department of Social Welfare, Bureau of Services for the Blind, New York City, New York*

## Ohio

"During the current school year (1939–40) the Ohio Commission for the Blind, with the co-operation of the division of special classes, State Department of Education, conducted eye surveys in five city and four county public school systems, and one state residential school (Boys' Industrial School, Lancaster, Ohio), having a total

enrollment of 21,841. Eight hundred and five cases were examined clinically, and 25 cases reassigned from this group to the division of special classes. The school eye surveys will be continued to furnish more adequate information on local eye hygiene needs and to assist extension of sight-saving facilities to areas in need of such service."

*—Commission for the Blind, Department of Public Welfare, Columbus, Ohio*

### South Carolina

"With full realization that a large part of any program for the prevention of blindness and conservation of vision lies in the field of education, the Division for the Blind of the Department of Public Welfare of South Carolina has endeavored, since the inauguration of its program, to make this phase of work as inclusive as possible. This spring, the Division has arranged for nine lectures on eye health, to be given by outstanding ophthalmologists at Winthrop College. Winthrop is the largest college for women in the State of South Carolina. The lectures were splendidly attended, and their reception was most gratifying. Two similar lectures were given at The Citadel, Charleston, South Carolina, a military college of national recognition. Three lectures were likewise given at the University of South Carolina. The Division hopes that similar procedure may be followed each year, and that these lectures may become a regular part of the health curriculum in colleges and schools throughout the state.

"The School for the Blind of South Carolina has been a great asset to the program for the handicapped. Mr. W. Laurens Walker, Superintendent, has co-operated in every respect, making it possible for the Division to assist in examinations and treatment of many of the students attending the institution. Since the beginning of its program, the Division has been furnished with copies of medical reports of students—a service of tremendous value in the matter of compiling state statistics, studying causes of blindness, and in following up cases. Mr. Walker has just announced that he is requesting the Board of Commissioners of the School to make ophthalmological examinations a prerequisite for entrance. These examinations will be made by a qualified ophthalmologist, through the Division for the Blind. This procedure will provide each applicant with the opportunity of every possible treatment for the restoration of vision before admission to the School for the Blind."

*—Division for the Blind, State Department of Public Welfare, Columbia, South Carolina*

### Tennessee

"On May 6, 1940, the Sight Conservation Service completed its first two years of service. During this two-year period, 331 persons have had sight restored to them in one or both eyes, in amounts varying from two per cent to normal or better than normal vision, either by surgery and glasses, surgery, treatment, or by glasses alone. Nine persons for whom surgery to restore sight was arranged, and for whom hospitalization was also arranged, have refused to accept these services for one reason or another. Eight other persons have had surgical operations to restore sight, all of which have been successful, but as yet no report on the amount of sight restored to them has been received by this Service. Ninety-eight operations to restore sight and prevent blindness have been performed by eye physicians of the state for persons referred to them by this Service, and only three have been failures—two being corneal transplantations, the other a cataract extraction. The prognosis of these three was very poor prior to surgery, so these failures were anticipated, but the Sight Conservation Service felt that these three persons should be given every possible chance to regain sight.

"During this two-year period, total or partial blindness has been or is being prevented in either one or both eyes in 197 persons, the prevention being accomplished by surgery, treatment, or by glasses alone. Fifteen persons, for whom surgery and hospitalization were arranged by the Sight Conservation Service in an effort to prevent their going blind in one or both eyes from various eye conditions causing blindness, have refused to accept these services. Fourteen of these have been persons applying for aid to the blind under the Social Security Act. The causes of blindness represented in this group of 197 persons in whom blindness has been or is being prevented are: glaucoma; pterygium; sympathetic ophthalmia; trachoma; diabetic cataract; choroiditis and chorioretinitis due to focal infection; high hyperopia with amblyopia, and possibly syphilis and progressive myopia."

—*Sight Conservation Service, State Department of Health, Nashville, Tennessee*

### Washington

"A Public Health Nurses' Institute was held in the State of Washington, in three sections of the state, during the month of February, 1940. The Institute was conducted jointly by the State Department of Health and the Division for the Blind, State Department of Social Security. Through the co-operation of the Na-

tional Society for the Prevention of Blindness, Miss Eleanor W. Mumford was available for the Institute. In addition to the public health nurses, the field representatives of the State Department of Social Security were permitted to attend. The Institute has shown active results by the cases referred for care through the public health nurses throughout the state."

*—Division for the Blind, Department of Social Security, Olympia, Washington*

## Note and Comment

**New Sound Slide Film Covers Prevention of Industrial Eye Accidents.**—How eye accidents are prevented in industry, through education of workmen and the use of goggles, masks, and other protective equipment, is dramatically portrayed in "The Eyes Have It!" a new sound slide film sponsored by the National Society for the Prevention of Blindness.

Combining humor with a serious presentation of the factors responsible for eye accidents in industrial plants, this educational film is intended for groups of workmen and foremen as well as safety directors. It is anticipated that wide use will also be made of this production by local conservation of vision committees, safety councils, and other agencies who have as part of their program the subject of sight conservation.

The tragedy of blindness resulting from carelessness is contrasted with the absence of eye injuries where hazards are recognized and a continuous safety campaign is conducted. The production was directed by Harry Guilbert, a member of the industrial advisory committee of the National Society for the Prevention of Blindness, and director of the bureau of safety and compensation of The Pullman Company.

The production consists of a 35-mm. film strip of 122 still pictures synchronized with a twelve-inch, double-faced, electrically transcribed record, and takes about twenty minutes to show. Copies may be borrowed for review purposes, free of charge except for transportation costs both ways.

The cost of this sound slide film is $7.50. Inquiries should be addressed to the National Society for the Prevention of Blindness, 50 West 50th Street, New York City.

**Large-Type Editions of the Scriptures.**—Modern advocates of large-type books may be interested to learn that the American Bible Society of New York pioneered many years ago in the presentation of the New Testament, the Psalms, and a complete Bible in what they term their "Great Primer" Edition. A copy of the Psalms, dated 1867, recently came to the attention of the National

Society for the Prevention of Blindness, leading to information from the librarian of the American Bible Society that the first large-type New Testament was published by them in 1857; a volume containing the Psalms alone appeared the following year; and, over 70 years ago, in 1869, the same Society produced their first Great Primer Edition of the Bible.

**Far-Reaching Ophthalmic Facilities in Leeds.**—A full and informative report of the school medical officer of the City of Leeds has been published, covering the year ended December 31, 1938. Of 71,142 children enrolled at this date, 142 had defective or impaired vision. An innovation was the introduction into the Class Register of pages, to form a running record while the listed children remained enrolled, indicating pupils requiring glasses at the time of medical inspection. Defects observed and treated include 9,133 vision examinations, of which 5,626 were classified as special cases. A solitary child suffering from trachoma represented the only residential treatment on record for the year; in this case the child was hospitalized, and recovery was complete. The medical officers have devoted special consideration to half-yearly examinations of progressive myopia in pupils whose vision indicates probable transfer to sight-saving schools. Continued study has been given to causes of defective vision in the "infant" (three- to seven-year-old) group, and preliminary vision tests by nurses of children too young to identify letters have been found successful. Increased attention was given to cases of squint; pupils in question were required to wear for three months the prescribed glasses, or an occluder for the good eye, ordered by the medical officer. Responsive cases have been further improved by orthopic training. Partially-sighted Leeds children totalling 43 were entered in two special schools during the school year summarized. Comparisons with previous records indicate a decrease of incidence of blindness in children. Classwork in reading aids indicates the desirabiliy of extended use of these facilities.

**An Apostle of Neuro-Ophthalmology.**—It has been remarked with interest in American medical journals that a distinguished professor of ophthalmology, in his opening lecture at the Faculty

of Medicine in Paris, devoted attention to the analytic study of clinical relations between neural and ocular disorders, characterizing this study by the term "neuro-ophthalmology." It was pointed out that ophthalmology has ceased to be a subject sacred to the specialist, but has become increasingly prominent in phases of social medicine affecting the sight of school children, protection against industrial accidents, control of trachoma, and every aspect of blindness prevention. The World War saw the birth of the science of treating ocular wounds; present hostilities present new surgical emergencies. Wider instruction based on resulting new and enlarged techniques and skills will become accessible to ophthalmologists everywhere—greatly increasing the scope, and inspiring a wider and more keen appreciation, of their work.

**Report on India's Blind.**—Sir Michael O'Dwyer in his foreword to the report, "Blindness in India," summarizes the findings presented, attributing the high incidence of Indian blindness—half of which is known to be preventable—to the inertia of state and public bodies, and the dearth of voluntary organizations and private philanthropists whose support is needed to combat the obstructive problems of Indian illiteracy, fatalistic attitude, and want of civic responsibility. Ten years' effort in blindness prevention having produced but slight alleviation of the Indian situation, "Blindness in India" was prepared to inspire co-operation by existing bodies. Facts emphasized in this text indicate that eye diseases abound; trachoma is rife among Indian school children; authorities are convinced that much blindness results from infantile ophthalmia, the majority of the partially-blind population losing vision in infancy and childhood. First in each group of suggested reforms are treatment of ophthalmia neonatorum, and education of doctors, midwives, and mothers in its treatment; eradication of irritant remedies; and vaccination of smallpox contacts. Hardly less strong is the emphasis placed upon provision of sight-saving techniques and equipment in schools, with early and constant examination of the eyes of youth. Despite repeated setbacks in prevention of blindness work, modest grants to the Indian Red Cross for instruction of teachers and for preparation of simple printed material in Indian dialects have produced significant results.

**Glasses Can be Fascinating!**—A vivid and persuasive picture of the new world revealed to the patient who is correctly refracted for the first time, after rebellious insistence that nothing could be wrong with his eyes, is given in brief under the title "Before Glasses and After," in *The Kalends* of the Waverly Press, Baltimore publishers. The unwilling subject admitted he had long denied fatigue, poor distance vision, and dulled color sense; however, standard eye examinations showed an astigmatic condition and resulted in the prescription of necessary glasses. These made their first shy public appearance in a nearly empty streetcar, on the way home through busy streets. Curiosity to make comparisons tempted the reluctant patient to experiment in spite of himself. In enthusiastic delight, he writes:

> "I was stunned . . . I toyed with them (the glasses), removing and then replacing them; the contrast was fascinating. . . Over a month has passed and my glasses are yet a source of pleasure and freshness. . . Motion pictures and the theater are now open to me without any restraints. Now I can read that clock on the Johns Hopkins campus. I have been able to spend more time with my books; I have a keener conception of color . . . six hours of work is no longer a fatiguing task."

**Two Wars Teach England Eye Casualty Procedure.**—In 1914, England was unprepared for segregating grave ophthalmic casualties, and no means were at hand to provide for the war-blinded the long and specialized care and the subsequent treatment and training required. In the emergency St. Dunstan's Hospital was founded, and a London general hospital organized to receive and administer initial care to seriously injured eye patients and blinded soldiers scheduled for transfer there. In the post-war years, St. Dunstan's maintained, treated, and trained its resident charges, developing and enlarging its ophthalmic and other facilities to form a permanent home, possessing every advantage which could be utilized by and for the blind. Long before the outbreak of the present war, St. Dunstan's new home near Rottingdean, with complete modern equipment and trained surgical and nursing personnel, was offered to the government for accommodation of eye casualties from among the present fighting forces. From plans prepared

in advance of the need, dormitories and available indoor recreation space quickly became additional wards, and construction began at once on a new operating theatre block, connected by a bridge to the main building, designed without windows and equipped with the most modern artificial lighting and air-conditioning apparatus. In addition to providing for the blind, concentrated expert treatment is administered to serious eye lesions.

**X-Ray vs. Ophthalmoscope in Eye Injuries.**—A recent issue of *The Journal of the Medical Society of New Jersey* presents a paper by A. Russell Sherman, M.D., entitled, "X-Ray Localization of Intraocular Foreign Bodies from the Viewpoint of the Ophthalmologist," in which the usual method of *x*-raying eyes is briefly described and records are presented of accident patients whose initial *x*-ray examination failed to reveal the presence of foreign bodies in the posterior segment of the eye. Subsequent examinations taking place from a day to more than a year later disclosed the offending substance in eleven out of ninety-five instances. Dr. Sherman further considers the causes of inaccuracies in gauging or stating the exact location of the foreign body. It can be readily understood that all eyeballs are not of equal size, and that an object not more than one mm. in length may with difficulty be distinguished in the bone shadows from the skull. Involuntary movement of the patient's eye at a critical moment is a factor tending to encourage or exaggerate possible error. A further obstacle to the eye physician is his own inability to check the localizing report, which must have been prepared with the utmost exactness by the laboratory to correspond precisely to the conditions under which the *x*-ray was taken.

It is felt that minute office examinations with the ophthalmoscope will reveal and quite exactly localize a considerable percentage of intraocular foreign bodies. If visible in or near the lens, or lying on the retina, localization by this means may prove more dependable than any *x*-ray examination, and permit of speedier relief for the patient. Of course in cases where the foreign body eludes detection by the ophthalmoscope, but the gravity of symptoms urges immediate removal, *x*-ray should be resorted to without delay. It is recommended, however, that the ophthalmologist, to

whom the faintest corneal scar or defect of the iris is so significant, exercise great discrimination in his choice of a roentgenologist and, as a further safeguard, adopt an attitude of doubt toward negative *x*-ray reports in cases of alleged eye injury.

**M.I.T.'s Intensive Public Health Program.**—Massachusetts Institute of Technology, Cambridge, Massachusetts, through its Department of Biology and Public Health, this year inaugurates a graduate program of four summers' intensive work in Public Health, School Health, and Health Education. The program of study, in half-semesters during summer periods from 1940 through 1944 only, and leading to a Certificate in Public Health, is open to professional health workers holding a B.A. or higher degree and possessing distinct ability in the field of school health. Special arrangements may be made for completing the required work in two summer sessions in 1940 and 1941 and the second semester of the 1942 college year. Courses scheduled for the first summer only include Communicable Diseases; Principles of Sanitation; Public Health Administration; and Vital Statistics. Acceptable students not desiring to complete the four summers' consecutive courses for a degree are registered for individual courses to be offered during 1940 in General Bacteriology, Public Health Bacteriological Methods, and Food Technology.

**One Hundred Thousand English Eyes.**—For several years, England's National Ophthalmic Treatment Board has been reporting annually on its activities. The 1938–39 report presents a consolidation of findings on incidence of pathological conditions in over 50,000 cases of eye defects studied over the five-year period from 1934 to 1938 by eye physicians. As explained in some detail, in co-operation with the British Medical Association and the Association of Dispensing Opticians, the National Eye Service provides to eligible patients, at fixed inclusive charges, eye examination by a specialist and medical treatment as indicated, combined with provision of glasses where necessary. Lens prescriptions are dispensed, and the requisite glasses supplied, by opticians licensed by the National Ophthalmic Treatment Board. Statistics presented in the report for the year 1938–39 include an analysis of 50,741 eye cases

classified as follows: Error of refraction, 32,295; errors of refraction and other eye conditions, 14,047; other eye conditions only, 4,008; no appreciable defect, 391. The National Ophthalmic Treatment Board, having circularized English industrial groups to determine the degree of concern shown by employers regarding eyesight of their workers, has felt that continued emphasis must be placed on the value, to each group, of efficient industrial illumination and good vision, and the significance of both in quality and volume of work produced. To this end, the Board issued during the year, and circulated to the press, industry, and health officers, a booklet on "Vision in Industry." Educational films, news releases, industrial lectures illustrated by slides, and permanent exhibits maintained in busy locations, were employed to disseminate information on medical eye examinations and eye health.

# Current Articles of Interest

**Cataract vs. Glaucoma,** Louis Bothman, M.D., *Illinois Medical Journal,* October, 1939, owned and published by the medical profession of Illinois at 715 Lake Street, Oak Park, Illinois. Points out the difficulties in differential diagnosis of primary glaucoma with secondary cataract, and cataract with secondary glaucoma, complicated by the necessity for treating the glaucoma first and the cataract later. Since both conditions may appear in middle life, the ages of individual patients may not be indicative, but case histories given by intelligent and observant patients can be valuable. Vision alone is of little aid in diagnosis, but the size of the globe may be, and the field examination is of first importance. Constriction of the central field to within a few degrees of the fixation point, with findings of a scotoma or losses in the nasal field, most often are due to primary glaucoma. A small eye, usually hyperopic, the corneal diameter of which is 10 mm. or less, is likely to have glaucoma with complicated cataracts, whereas the large, often myopic, eye may present a cataractous condition with secondary glaucoma. Descriptions are given of slit-lamp study findings in senile cataract with glaucoma, and primary glaucoma with complicating cataract.

**Rôle of Vitamins in Ophthalmology,** Helen Holt, M.D., *Illinois Medical Journal,* May, 1939, published monthly by the medical profession of Illinois, 6221 Kenmore Avenue, Chicago, Illinois. Dr. Holt, in her paper presented at a meeting of the Chicago Council of Medical Women, reviews the teachings of early sages and healers regarding foods now recognized to contain high percentages of vitamins. It is remarked that vitamin A deficiency was evidenced in historic epidemics such as occurred in Russia in 1887, in Japan in 1896, and in Denmark in 1917. Since the discovery of vitamin A and the significance of its rôle in nutrition, no more than five cases of adult xerophthalmia have been reported in medical literature, and there is yet no indication that ocular symptoms of vitamin A deficiency have become more general during recent depression years. Although young children register lack of vitamin A more readily

than do adults, the author quotes workers with London children as pointing out that severe conditions attributable to vitamin A deficiency have become virtually unknown in the past decade, owing to the advances in living standards and infant care. On the other hand, a study published in 1935 showed native Chinese eye patients, for the most part children under the age of five years, presenting uniform symptoms of xerophthalmia because of A and D deficiency. Chinese soldiers and laborers studied in the 15–30 age group presented much the same picture, with ocular involvement sometimes so far advanced that total blindness was imminent.

Dr. Holt reviews the literature on vitamin A deficiency; cites night blindness as the most constant early ocular sign; hemeralopia may be present in mild forms, interfering with efficient dark adaptation and visual acuity in dim illumination. Incidence of mild vitamin A deficiency symptoms is cited in 45 cases in a group of 213 children and, from another study, in 26–75 per cent of children from different social groups. Vitamin $B_1$ is recommended in conjunction with vitamin A to aid absorption.

Toxic amblyopia producing central scotoma is a condition typical of vitamin B shortage, and marked results have been found to follow its administration, while pellagra cases showing retrobulbar optic neuritis with failing vision and photophobia have responded well to the addition to the diet of vitamin $B_2$ in the form of yeast, though not to fruit juices or cod liver oil. Capillary fragility resulting in a tendency to hemorrhage has responded to treatment with vitamin C, certain studies having shown lemon juice more effective than synthetic forms of the vitamin, possibly because it contains some additional favorable factor. Improvement was reported in the condition of a trachoma patient who had gotten lemon juice in his eyes by accident. Although no clinical studies of human vitamin D deficiency are noted, animal experimentation points to corneal changes resulting from its lack, and some authorities associate it also with the formation of cataract.

**Headaches: From the Point of View of the Ophthalmologist,** Warren D. Horner, M.D., *California and Western Medicine*, December, 1939, published monthly by the California Medical Association, 450 Sutter Street, San Francisco, California. Headache is

second only to defective vision in the list of complaints presented by ophthalmic patients. If use of the eyes precipitates or intensifies the discomfort complained of, the ophthalmologist is dealing with headache of ocular origin, as negative responses on these two points leave only the possibility of intracranial lesions. Where eyestrain exists, a patient will present related symptoms—blurring or burning of the eyes, and fatigue from close work; afternoon and evening headaches, mounting after protracted reading, driving, or attendance at moving pictures, and less intense on Sundays than during the working week. Type and location of pain is considered of secondary importance. Dr. Horner discusses the mechanism of headaches originating in organic or functional disorders of the visual apparatus, concluding that ocular headache in and about the region of the eye denotes local pathology, often accentuated through the sympathetic nervous system, or a condition within the brain or affecting nerves referring to the eye in such a manner as to simulate local irritation or congestion. Local factors involved in producing headache are enumerated as disturbances of refraction and accommodation; disturbances of ocular motility; disturbances of retinal function; and congestive states in and about the eye. Eye headaches in young people result in very great degree from astigmatism, and ocular headache in general is most commonly found to relate to hyperopia, and to mixed and myopic astigmatism.

**The Ophthalmological Aspects of Disturbances of the Endocrine System,** Elias Selinger, M.D., *Illinois Medical Journal*, February, 1940, published monthly by the medical profession of Illinois at 715 Lake Street, Oak Park, Illinois. Defines the dilemma of the ophthalmologist when confronted with a persistent ocular condition which arises indirectly from systemic causes and is unresponsive to local treatment—particularly in patients presenting no picture of focal infection which can be confirmed by findings of the internist or other consultants. Admitting that the specialization of physicians in endocrinology is comparatively new, and that overenthusiasm is not uncommon in this field, Dr. Selinger deplores the fact that vision may be permanently sacrificed through failure of the general practitioner or ophthalmologist to comprehend the importance of adequate investigation into possible endocrine imbal-

ance. Briefly reviewing the acknowledged interrelationships of the glands of internal secretion, he presents a general classification of ocular findings allied to endocrine disease: hyperthyroidism; hypothyroidism; parathyroid insufficiency; tumors of the pituitary gland; functional derangement of the pancreas, gonads, adrenals, and liver. There can be little doubt that many ocular symptoms are related to endocrine dysfunction; some few are quite universally recognized, but it is felt that an impressive further list may frequently be regarded with suspicion. Dr. Selinger recommends routine examination of the endocrine system in cases presenting intractable iridocyclitis, papillitis, blepharospasm, and retrobulbar neuritis.

# Book Reviews

A Manual of Diseases of the Eye, Charles H. May, M.D. Sixteenth Edition. Baltimore: William Wood & Company, 1939. 515 p. ill.

This latest edition of "May" is, in all respects, worthy of its predecessors. The information is presented concisely, in a logical sequence. Academic discussions and moot questions are deliberately avoided, so that the student is presented with an orderly array of practical and accepted facts, as we know them. The leading paragraph of each chapter, which presents the anatomy and physiology of the part under consideration, is a gem of succinctness.

In this new edition, which has been carefully revised, the subject matter has been brought up to date and many new illustrations have been added. (We are glad to see that others, reminiscent of the gay nineties, have been deleted.)

The book is well indexed, with occasional cross references in the text. The format is pleasing and the type is large and clean.

May's book is a good investment.

—Willis S. Knighton, M.D., F.A.C.S.

Manual of Directions for Gates Reading Readiness Tests and Gates Reading Readiness Tests. Arthur I. Gates. New York: Bureau of Publications, Teachers College, Columbia University, 1939.

The Gates Reading Readiness Tests, as explained in a comprehensive manual of directions, were constructed to measure readiness for beginning reading, to predict the rate of development of reading ability and to diagnose the pupil's status, thus revealing his needs in each of the several most important abilities required in learning to read.

The author suggests that a composite or average of the scores from the several sub-tests is best to use for determining the stage of readiness at which the pupil has arrived, but that this composite average gives only general information and is not diagnostic. The author explains in the manual that the tests presented were selected after a series of investigations covering a number of years.

The tests consist of:

1. Three pictures; the examiner makes all statements regarding the situation or objects in the pictures and requests the pupil to carry out instructions by marking crosses or other symbols on the pictures.
2. Word matching.
3. Word-card matching.
4. Rhyming tests
5. Reading of letters and numbers.

These tests measure five important abilities for reading readiness. The author suggests, however, that several other abilities are worth exploring. General directions are presented for giving the series, and careful, specific directions for each test, together with directions for scoring. Emphasis is laid on using the test scores as a guide in instruction; thus, if a pupil's score is low in the first test, he should have pre-reading activities in looking at and talking about pictures. If he scores low in the rhyming test and other forms of word-sound perception, he will need ear training.

Percentile scores are given by the author showing what may be expected of the pupils. Thus pupils having percentile scores 80 to 100 have the ability to learn rapidly with minimum study and should be able to read at sight 2nd and 3rd grade material, while at the other end of the score scale, children having percentiles below 10 will need weeks or months of reading readiness before undertaking typical pre-primer work. However, the author warns that it is impossible to draw a sharp line between those ready and not ready to begin reading, but wisely recommends that the teacher use the results in the study of her own individual pupils. The author emphasizes the importance of vision and hearing tests, and that all suffering from visual and auditory defects be given the necessary attention.

In the first test it is necessary to have many details in the pictures. These may at first prove somewhat confusing to the young child who is not used to close eye work. The examiner will do well to take this into consideration. The printing and the pictures of the other tests are in good size and the type is clear and well chosen. Both tests and manual should be of great value to those interested in beginning reading.

YOUR HEALTH DRAMATIZED: Selected Radio Scripts, W. W. Bauer, B.S., M.D., and Leslie Edgley. New York: E. P. Dutton and Company, Inc., 1939. 528 pp.

The thirty-two radio scripts in this book—most of them for fifteen-minute programs—provide valuable study material for anyone engaged in public health education. Five different ways in which they may be used are called to our attention: as actual broadcasts; simulated broadcasts; stage plays; informal classroom plays; and as dramatic readings. Helpful suggestions are made for each type of presentation.

The material is based largely on a series of actual broadcasts which received first award at the Ninth Annual Meeting of the Institute for Education by Radio in 1938. Dr. Bauer is Director of the Bureau of Health Education, American Medical Association, and Mr. Edgley is on the staff of the National Broadcasting Company. Their collaboration has produced a volume which should be exceedingly helpful to every health educator.

One of the scripts, entitled "Seeing and Hearing Well," is prepared in two parts which can be used separately or together by making a few simple changes in the opening and closing announcements. The first part, dealing with the importance of eyesight, shows the harmful results from refusal to wear glasses, and exposes quacks whose methods may injure eyesight.

—DAVID RESNICK

READING READINESS, M. Lucile Harrison. Revised and Enlarged Edition. Riverside Press, Cambridge, Mass.: Houghton Mifflin Co., 1939.

The author's revision and enlargement of her earlier work on the same subject is the result of her realization that, until recently, reading readiness has been concerned only with preparing the pupil for the initial reading program in the elementary school, whereas the present need is for the preparation of reading at all educational levels at which reading is used as a tool for learning.

Part I of the new edition is designed primarily as an aid to kindergarten and first-grade teachers and presents much of the material in the earlier volume. Part II is concerned with aids to teachers at all levels beyond the preparatory period.

In Chapter IX, "The Instructional Program for Readiness to Carry Out the Thinking Side of Reading," the author summarizes four instructional jobs in the reading readiness program: developing the necessary concepts with which to read; building vocabulary, including the necessary words as carriers of meanings; increasing the ability to understand sentences; developing interests in the minds of pupils for reading specific material so that the interest in the achievement of meaning in reading shall be at a high level.

Increased interest in reading problems during the last decade has resulted in such a vast number of books on the subject that it is difficult to find material that has not been presented in one form or another. It is therefore the more noteworthy that the author has been able to develop so many interesting and helpful suggestions. The material is clearly presented and the very full bibliography should prove an excellent source of reference. The list of books for children on the preparatory level is very helpful. It might have been well to indicate pre-primer material that is available in the size and kind of type that is acceptable for the young child.

The typical case study presented includes an individual chart for reading readiness which should greatly assist teachers in making and keeping records.

### Briefer Comment

SAFETY EVERY DAY, Herbert J. Stack, Ph.D., and Esther Z. Schwartz. New York: Noble and Noble, Inc., 1939. 128 p.

"Safety is, after all, not something to be memorized, but rather something to be lived." Reasoning that children will not acquire safety habits through learning rules or words, but rather by concrete experience and resulting attitudes which tend to insure safety in any life situation presenting an element of danger, the authors of this attractive little book have interpreted in terms of *positive* safety attitudes and behavior the normal, everyday activities of the average school child throughout the year. Brief and telling fictional safety episodes printed in large, clear type, constituting a supplementary reader for primary grades, illustrated by simple and realistic photographs of typical children, make up this text. Exer-

cises have been provided at the end of each chapter, designed to suggest situations and circumstances common to children's study and play in which related safety habits can be applied and practiced.

HEALTH OFFICERS' MANUAL, J. C. Geiger, M.D., Dr. P.H., Sc.D., LL.D. Philadelphia: W. B. Saunders Company, 1939. 148 p.

This is a volume based on the personal experience of the author as Director of Public Health for the City and County of San Francisco, California, and prepared especially for health officers, public health administrators, and all others concerned with the administrative and technical problems of organized public health work. It is suggested in the preface that the present organization of the San Francisco Public Health Department has been utilized as a model in preparation of the present manual, not because of its perfection but since its relatively broad fields of public health work are reasonably representative. The introductory chapter covers organization of a public health department and includes methods of educating the public, training personnel, and preparing a budget. In the section on medical services are recommended the reporting and isolation of ophthalmia neonatorum and trachoma cases, and the exclusion from attendance at school of children with acute contagious conjunctivitis. The section devoted to child hygiene does not overlook early correction of remediable eye defects through the good offices of well baby centers, routine eye examinations in and outside of school, and maintenance of classes for partially-seeing and otherwise handicapped children. The opportunity afforded the visiting nurse for prompt recognition of need for preventive or corrective eye treatment is stressed in a discussion of the functions of public health nursing. Further chapters concern the establishment of departmental records and statistics, and the problem of good inspection and control.

PRIMER OF ALLERGY, Warren T. Vaughan, M.D. St. Louis: The C. V. Mosby Company, 1939. 140 p.

Dr. Vaughan's latest "guidebook for those who must find their way through the mazes of this strange and tantalizing state," an outgrowth of earlier efforts to advise both physician and patient, is designed as a companion piece to the same author's ***Practice of***

*Allergy.* The information—some sections taking the time-honored and popular form of questions and answers—is presented with a light touch, heightened by use of Webster cartoons and other amusing line drawings, but fundamentally the presentation is sequential, lucid, and understandable. Specifically the text alludes only in passing to ocular manifestations of allergic conditions, and then only to commonly recognized conditions. In a final chapter are contained a suggested bibliography for further lay study; general directions to the sufferer with hay fever, asthma, allergic eczema or indigestion; and diet charts and outlines for individual record-keeping of symptoms by the patient.

YEAR-BOOK OF LABOUR STATISTICS, 1939. Geneva: International Labour Office, 1939. 239 p.

This fourth issue follows the established form of presentation, quoting figures supplied by official government publications or bureaus of 57 countries throughout the world. The tabulated material and a text in both French and English cover general levels of world employment, and employment and unemployment data by industry; hours of work by industry, and normal weekly work hours by industry; studies of wages per hour, and salary scales by industry; tables showing monthly rents of workers' dwellings; emigration and immigration figures; summary of industrial disputes, strikes and lock-outs; and world indices of economic activity. No survey of public health or industrial accident problems is included.

*Editor's Note.*—A letter from Dr. Park Lewis calls attention to the following corrections in his review of Anderson's "Hydrophthalmia or Congenital Glaucoma," appearing on page 79 of the March REVIEW. Line 10 should read "not incompatible with fairly good sight . . ." Dr. Lewis writes further, "I was in error in saying that Dr. Anderson had not referred to Dr. Barkan's new goniotomy measure. I am apologizing for the omission, and hope it may be corrected in the next number of THE SIGHT-SAVING REVIEW."

# Current Publications on Sight Conservation

**Note.**—The National Society for the Prevention of Blindness presents the most recent additions to its stock of publications. Except for the more expensive ones, single copies are sent free upon request. Unless otherwise specified, they are reprinted from THE SIGHT-SAVING REVIEW. New publications will be announced quarterly.

**330. The Attitude of the Social Security Board Toward Prevention of Blindness,** Ruth O. Blakeslee. 20 p. 10 cts. Discussion of Board's rôle in blindness prevention, and recommendations for state aid administration.

**331. The Place of Medical Social Work in Ophthalmological Services,** Edith M. Baker. 8 p. 5 cts. Outlines the broadening functions of medical social eye service workers in administrative and educational fields.

**332. Blindness from Glaucoma Can and Should Be Prevented,** Park Lewis, M.D. 4 p. ($1.00 per C; $7.50 per M.) An eloquent plea for concerted efforts to eradicate glaucoma through early detection and treatment.

**333. Sun Glasses,** Arno E. Town, M.D. 12 p. 5 cts. A lucid and welcome discussion, supported by survey findings, of a seasonable eye health and comfort problem.

**D128. Protecting Eyes in Industry. U. S. Department of Labor Bulletin No. 37.** 18 p. Addresses presented at the industrial session of the Society's 1939 Annual Conference, by Louis Resnick, Leonard Greenburg, M.D., and Verne A. Zimmer.

**D134. Development of the Eye,** Willis S. Knighton, M.D. 8 p. 5 cts. Brief discussion of human eye evolution, presented during luncheon session on the preschool child, at the Society's 1939 Annual Conference. Reprinted from *Archives of Pediatrics*, April, 1940.

**D135. What the Pediatrician Might Do to Save Sight in the Preschool Child,** Philip Moen Stimson, M.D. 4 p. ($1.00 per C; $7.50 per M.) Paper presented at the luncheon session on the preschool child at the Society's 1939 Annual Conference. Reprinted from *Archives of Pediatrics*, May, 1940.

**D136. Whom Shall I Consult—Optician, Optometrist, Oculist, Ophthalmologist, or Ophthalmic Physician?** L. L. McCoy. 4 p. ($1.00 per C; $7.50 per M.) Reprinted, with additions, from *Hygeia*, December, 1930.

**D137. Ocular Factors in Poor Readers in the Saint Louis Public Schools,** Frederick O. Schwartz, M.D. 4 p. ($1.00 per C; $7.50 per M.) Analysis of a study of eye deficiencies and reading disabilities, with summary of subsequent progress in reading. Reprinted from *American Journal of Ophthalmology*, May, 1940.

## Contributors to This Issue

**Dr. Moacyr E. Alvaro,** whose paper prepared jointly with **Mrs. Eleanor Brown Merrill,** this Society's Executive Director, appears in this issue, is a prominent Brazilian ophthalmologist, representing his country on the Board of the International Association for Prevention of Blindness.

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The author of our leading article on federal prevention of blindness attitudes is **Ruth O. Blakeslee,** Chief of the Division of Standards and Procedures, Bureau of Public Assistance, Social Security Board, Washington, D. C.

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The radio address on sight conservation here presented is one of many contributions from **Dr. Ellice M. Alger,** New York ophthalmologist, and a member of the Society's Board of Directors.

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**Edith M. Baker** is Principal Consultant in Medical Social Work of the Children's Bureau, United States Department of Labor, Washington, D. C.

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The FORUM presents a most timely paper on the wearing of sun glasses, prepared by **Arno E. Town, M.D.,** New York ophthalmologist and a new contributor to the REVIEW.

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Readers will enjoy the quaint picture of San Francisco's Chinese sight-saving class children, as seen by their teacher, **Ann McHugh.**

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The REVIEW welcomes the opportunity to publish a recent statement by **Dr. P. Bailliart** of Paris, President of the International Association for the Prevention of Blindness.

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Book reviewers: **Willis S. Knighton, M.D.,** of New York City; **David Resnick,** Publicity Director, National Society for the Prevention of Blindness.